App Orchard

App Orchard Integration Technology Catalog

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Exhibit B

Epic | 1979 Milky Way | Verona WI 53593 | Voice: 608.271.9000 | Fax: 608.271.7237 | www.epic.com

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Introduction

The following are among the benefits of the App Orchard program:

- Access to hundreds of integration technologies, including single sign-on options for embedding, launching, and signing into web-based applications using OAuth2 or SAML 2.0, Epic's implementation of the Fast Healthcare Interoperability Resources (FHIR) standard
- More than 400 web services
- The Kit data model, which provides a standard means of extracting clinical, operational, and financial data from health systems' Caboodle databases, Epic's enterprise data warehouse product.

This document is a catalog of available integration technologies and their descriptions organized by category.

Real-Time APIs

Epic provides a collection of fully encapsulated, high-level business services that developers can use to perform operations on Epic data and meet specific business requirements for their applications. These services have discrete request and response parameters and error conditions. The documentation for these web services is available on the App Orchard website to enrolled program members.

Note that only the APIs in the FHIR and Kit sections are available to Bronze tier members.

Billing

CalculateEstimate

This web service encapsulates Epic's patient estimates calculation logic. It requires building estimate templates in Epic and can be used to calculate estimated total charges, contractual amounts, and patient responsibility based on an estimate template record and the insurance and benefits information provided. No estimate record is created or retained in Epic when using this web service. Epic organizations and third parties can build tools that can expose estimated patient responsibility for a medical service using build they have in Epic without needing to maintain this information in an additional system and handle the same complexities that our tool does.

CreateChargeSession

This service creates a group of Charge Router charge records, saves them in a new charge session, and submits them to the Charge Router.

GetAccountDemographics

This service returns the guarantor account's demographics information.

GetAccountPayments

This service returns an account's recent payments.

GetBillingPatientFromGuarantor

This web service is intended to be used in conjunction with an IVR system. Given a guarantor ID, this service returns the associated billing patient ID and patient ID type. You can then use that ID when calling other web services. You might use this web service if your organization uses Single Billing Office, but you can also use them with only Resolute Hospital Billing or Resolute Professional Billing.

GetBillingPatientFromHospitalAccount

This web service is intended to be used in conjunction with an IVR system. Given a hospital account ID, this service returns the associated billing patient ID and patient ID type. You can then use that ID when calling other web services. You might use this web service if your organization uses Single Billing Office, but you can also use them with only Resolute Hospital Billing or Resolute Professional Billing.

GetCoverageBuckets

This web service will retrieve coverage, plan, and benefit bucket limit and accumulation information for a subset of coverages linked to a specific patient. If you need to request benefit bucket information for multiple coverages with one call, use the GetCoverageBucketsMultiple web service. GetCoverageBucketsMultiple uses the GetCoverageBuckets web service to return this information.

GetEncounterCharges

This service returns the charges from a patient's encounter.

GetPatientBillingDetails

This service returns a patient's billing details. It is intended for patient use. It will appear as if the access granted through this service was granted to a patient regardless of how the service is used. If the patient is not MyChart active, this service will create an inactive MyChart account for them. As a result, use of this service will contribute to your organization's MyChart subscription counts.

GetPatientFlags

This web service returns all patient flags (patient FYIs) associated with the patient.

GetPaymentSessionData

Third-party payment vendors can use this web service to retrieve dynamic data stored for a payment session in MyChart.

PostAppointmentPayments

This web service provides functionality for multiple appointment scheduling with a single payment. On customer web sites, customers can collect a single payment from scheduling multiple appointments. This web service takes the single transaction ID and array of appointment date identifiers and posts payments to Epic for each individual appointment. This web service does not process the payment or create the appointments within Epic.

PostTransactionResult

Third-party payment vendors can use this web service to post the transaction result for a payment session in MyChart.

SendAccountLetter

This web service is intended to be used in conjunction with an IVR system. Given a hospital or guarantor account ID, this service returns a SmartText letter for the specified account level. The default is the send a SmartText letter for a hospital account. You might use this web service if your organization uses Single Billing Office, but you can also use them with only Resolute Hospital Billing or Resolute Professional Billing.

SendHospitalAccountDetailBill

This web service is intended to be used in conjunction with an IVR system. When prompted by an IVR system, this service prints or queues a detail bill for a hospital account.You might use this web service if your organization uses Single Billing Office, but you can also use them with only Resolute Hospital Billing or Resolute Professional Billing.

SetPatientFlag

This web service sets the patient flag.

VoidCharge

This web service voids a Charge Router charge record.

Clinicals

AddHealthMaintenanceModifier

This service adds a Health Maintenance modifier to a patient.

AddMedicationRefills

This web service adds refills to an ambulatory medication order without reordering the medication order. This service accepts order and patient information, then verifies that the patient in the order is the same as the patient in the request. The service optionally accepts the numeric refill number or PRN indicator and an end date. Note that the service requires either a number of refills or a PRN indicator. If a PRN indicator is passed, the end date is a required field and must be a future date (relative to the service request). If a PRN indicator is passed, a PRN valid for one year is assumed.

AddPatientsToMyPatientList

This service adds patients to an existing patient list. This service does not add patients to the list if the patient is already part of a list.

CareGap

This web service allows third-party services to send patients' care gaps to Epic and store them in Epic released SmartData elements.

CreateFindingFollowup

This web service creates a finding follow-up record for a critical imaging or lab result. Users in Hyperspace can acknowledge the finding follow-up causing it to move from a status of open to complete. The external system can close a follow-up using the DocumentFollowupCommunication web service.

CreateMyPatientList

A patient list is an easy way for clinicians to group patients that meet a specific criterion. This service can be used to create a user specific patient list and add patients to the list. The name of the list is an input to this service.

CreatePatientEvent

This web service is designed to receive an entity, convert the information into patients, and send a notification to all Epic Monitors with said patient in the list.

DocumentFollowupCommunication

This web service documents communication for a finding follow-up record. Each time it is called, a line is added to the follow-up's communication history. In addition to documenting communication, it can optionally be used to change the status of the follow-up to complete. The external system can create a follow-up using the CreateFindingFollowup web service.

EditProviderProcedureAuthorizations

This web service exposes OpTime's surgeon authorizations for provisioning on provider records. This web service specifically handles editing of the pre-Epic 2015 OpTime authorizations structure. Authorizations in on provider records authorize surgeons to perform certain procedures within Epic in certain locations. Each procedure is linked to specific locations and services. A provider can also be authorized for all procedures within a location and service pair.

EditProviderProcedureKeyAuthorizations

This web service exposes OpTime's surgeon authorizations for provisioning on provider (SER) records. This web service specifically handles editing of the OpTime authorizations structure in Epic 2015 and later versions. Authorizations on provider records authorize surgeons to perform certain procedures within Epic in certain locations. A procedure is authorized in a location for a provider if the provider record is authorized in the location, service, and procedure key that are also specified in the procedure record. A provider record contains a list of locations, services, and procedure keys (with the ability to be marked as authorized for all services, all locations, or all procedure keys). Providers can also have specific service and procedure key lists per location (a location-specific authorization override), this override also provides the option of All Services and All Keys.

GenerateLettersFromTemplate

This web service generates patient letters from patient panels in an external system. Users can generate and print letters for those patients in Epic. When letters are generated from the external system, generic letters appear in Epic, so users viewing a patient's chart are aware that a letter has been sent. The reason for letter and any comments also appear.

GetActiveAllergies

This service provides the caller with a list of active allergies for the patient.

GetActiveProblemList

This service provides the caller with a list of active problems for the patient.

GetClinicalNoteDetails

This read-only web service retrieves a detailed view of a specific clinical note. The HTML output includes the note's text and important metadata about the note, the same metadata we would typically show within Hyperspace. It will not, however, return images either embedded within the text or attached to the note.

GetClinicalNotes

This read-only web service retrieves clinical notes for a patient given an encounter or time range. It returns a list of notes with enough metadata about each note to construct a meaningful list for a user to review, such as author, note type, and date of service. The note text is not returned in this web service.

GetComponentMetadata

Returns information about the data stored in a component record.

GetCurrentMedications

This web service will return the patient's current outpatient medications (including suspended), current inpatient medications, or both current outpatient and inpatient (including suspended) medications based on the user's input. The user can specify the number of days to include discontinued and ended non long-term medications. This web service also returns long-term medications. The patient's admitted status is shown in the results. Those inpatient medications administered in an ambulatory setting will be flagged by "IsClinicAdministered" and the persistent ones across encounters will be flagged using "IsPersistent".

GetCurrentMedicationsByGrouper

This web service is an addition to the existing web service GetCurrentMedications. This web service provides the user with a list of current medications for the patient filtered by grouper ID. It functions exactly like GetCurrentMedications, except with the additional parameter GrouperID to specify that only medications belonging to the given grouper should be returned.

GetDeviceData

This web service loads device data for a patient contact. Device data is loaded by flowsheet rows. Both unvalidated and validated data is included. Invalid data, deleted data, and data from beyond the purge limit is not included.

GetFlowsheetRows

This web service retrieves flowsheet rows from a patient's chart. The user can provide an array of flowsheet IDs and all matching flowsheet rows and columns are returned that fall within the lookback period.

GetHealthMaintenanceTopics

This service returns a list of Health Maintenance topics for the patient.

GetIntakeOutputTotals

This web service retrieves intake/output totals from a patient's chart. The user provides an array of shift start times and the web service returns corresponding IOShiftTotalsObjects, which contain intake, output, net, and weight, as well as information about the IO category.

GetMedicationAdministrationHistory

This web service retrieves MAR history data from a patient's chart. The user provides a patient contact and a list of order IDs. The web service returns a list of medication orders for that patient that have administration events. The queried orders may or may not be considered active to be returned.

GetMedications

This web service combines the features of the GetCurrentMedications, GetActiveMedications, and GetCurrentMedicationsByGrouper web services.This web service returns the patient's current outpatient medications (including suspended), current inpatient medications, encounter specific medications that were marked as taking, or both current outpatient and inpatient (including suspended) medications based on the user's input. For current medications searches, the user can also specify the number of days to include discontinued and ended orders. This web service will also return long-term medications for current medications searches. The patient's admitted status is shown in the return. Those inpatient medications administered in an ambulatory setting will be flagged by "IsClinicAdministered" and the persistent ones across encounters will be flagged using "IsPersistent". For encounter-specific medications search, you must provide a contact must be provided. You can provide a grouper record such that only medications in the grouper is returned. Otherwise, all medications are returned.

GetMyPatientLists

This service can be used to return all the user specific patient lists for a single user. The name and identifier for the list is returned as the response to this request.

GetPatientContacts (2018)

This web service a list of patient contacts. It was made available in Epic 2017. It is similar to GetPatientContacts, but uses Break-the-Glass security checks to determine whether any contacts are returned.

GetPatientList

This web service returns the list of patients that a community user has managed access to in your web application.

GetPatientResultComponents

This service returns an array of results for a single component record for a single patient.

GetPatientResultsByProcedure

This service returns result information for a particular procedure. It is similar to GetPatientResultComponents, but is designed for searches by procedures, such as an X-Ray. It returns results grouped by order.

GetPatientsOnMyList

This service can be used to retrieve the patients on a My List and the System Lists contained in that My List. For each patient on the list, the service will return the patient IDs, name, age, and sex. If the requested My List contains a System List with unoccupied beds, the unoccupied bed rows are returned because this service retrieves only patients on a My List.

GetPatientsOnSystemList

This service retrieves the patients on a System List. For each patient on the list, the service returns the patient IDs, name, age, and sex. If the requested System List has unoccupied beds, the unoccupied bed rows will not be returned since this will only retrieve patients on a System List.

GetPatientStagingData

This web service retrieves a patient's oncology staging information. For each recorded problem on a patient's problem list with one or more linked staging forms, the web service returns the most recent clinical and pathological staging forms.

GetPreferredAndRecentPharmacies

This service returns a list of the patient's preferred and recently used pharmacies.

GetResultsForOrder

Gets result information for a single order. Does not return information for imaging orders or susceptibility tests.

GetSmartDataValues

This web service retrieves raw values for SmartData elements.

GetSurgicalRecordLight

This service returns data elements from the surgical cases and logs for the record ID provided in the service request. It also logs user information to the audit trail. If both case and log records exist, the service returns data from both records. Otherwise, it returns data for the existing record. This service is similar to the GetSurgicalRecord web service, with the following differences:

- This web service returns less detailed information.
- This web service returns unscheduled cases by default.
- The web service can filter the records it returns with a rule.

GetSurgicalRecordsLight

This service returns data elements from the surgical cases and logs for the record ID provided in the service request. It also logs user information to the audit trail. If both case and log records exist, the service returns data from both of the master files. Otherwise, it returns data for the existing record. This service is similar to the GetSurgicalRecord web service, with the following differences:

- This web service returns less detailed information.
- This web service returns unscheduled cases by default.
- The web service can filter the records it returns with a rule.

GetTreatmentTeam

This web service allows retrieval of a patient's treatment team including attending and admitting providers.

OverrideHealthMaintenanceTopic

This service overrides a Health Maintenance topic for a patient.

PostponeHealthMaintenanceTopic

This service postpones a Health Maintenance topic for a patient.

RemoveHealthMaintenanceModifier

This service removes a Health Maintenance modifier for a patient.

RemovePatientsFromMyPatientList

This service removes patients from an existing patient list.

SearchPatientList

This web service returns a set of patients whom the community user has Managed Access to in your web application based on search criteria.

SearchPharmacies

This service searches for pharmacies. For example, you can find pharmacies located near the patient, as determined by the patient's ZIP code.

SetPreferredAndEncounterPharmacy

This service adds a pharmacy to the patient's list of preferred pharmacies and optionally sets the pharmacy being used in an encounter.

SetSmartDataValues

This web service sets raw values for SmartData elements. This web service does not support the following contexts:

- Note
- Order
- Concept

Also, this web service does not support setting a value for SmartData elements of type Image and Hierarchy.

UpdatePatientTreatmentTeam

This web service allows external systems to:

- Add new entries to a specified patient's treatment team.
- Update existing entries on a specified patient's treatment team.

ViewProviderProcedureAuthorizations

This web service exposes OpTime's surgeon authorizations for viewing from provider records. This web service specifically handles viewing of the pre-Epic 2015 OpTime authorizations structure. Authorizations in the provider resource authorize surgeons to perform certain procedures within Epic in certain locations. Each procedure is linked to specific locations and services. A provider can also be authorized for all procedures within a location and service pair.

ViewProviderProcedureKeyAuthorizations

This web service exposes OpTime's surgeon authorizations for viewing from provider records. This web service specifically handles viewing of the OpTime authorizations structure for Epic 2015 and later versions. Authorizations in provider records authorize surgeons to perform certain procedures within Epic in certain locations. A procedure is authorized in a location for a provider if the provider record is authorized in the location, service, and procedure key which are also specified in the procedure record. A provider record contains a list of locations, services, and procedure keys (with the ability to be marked as authorized for all services, all locations, or all procedure keys). Providers can also have specific service and procedure key lists per location (a location-specific authorization override), this also provides the option of "All Services" and "All Keys".

Core

GetImportDataLog

This service reads and returns the contents of the Chronicles Import Log.

ImportData

This service uses Chronicles import specifications to file data into the Epic system.

Credit Card

ElectronicPmtStatus

When collecting credit card payments, there are situations that could cause a patient's credit card to be charged, but not have a payment record in Epic. To avoid this situation, the failed transactions report logs error records, administrators can use to either post a payment in Epic or void the card transaction. As it is not automated, it could lead to patient's card being charged twice. This web service returns the status of the transactions associated to a particular payment ID and then would void the transaction at the gateway, wait for the transaction to complete, or do nothing if the transaction already exists in Epic.

PhoneSystem

When collecting credit card payments over the phone, you might not want the credit card number (as read by the patient) to be contained in the customer service recording files. You can use this web service to send a request to your phone system to pause the recording when the Hyperspace credit card entry form opens, and send another request to the phone system to resume the recording when the Hyperspace credit card form closes.

CRM

CreateCustomerServiceRecord (2014)

This web service allows initiation of a CRM record from an external source.

CreateCustomerServiceRecord (2014B)

This web service creates a CRM record from an external source.

GetCustomerServiceStatus (2014)

This web service gets the status of a CRM Record from an external source.

GetCustomerServiceStatus (2014B)

This web service gets the status of an existing CRM record.

LogPatientCommunication

This web service allows you to document communications with patients.

ResolvedCustomerServiceRecord

This web service updates an existing CRM record with information relating to the resolution of a remote task.

UpdateCustomerServiceRecord (2014)

This web service updates to a CRM Record from an external source.

UpdateCustomerServiceRecord (2014B)

This web service updates a CRM record from an external source.

EMPI

AssignPatientIdentifier

This web service generates and assigns an MRN to a patient in Epic or assigns an MRN provided by the caller to a patient in Epic. If the MRN is successfully assigned, the patient's ID table is returned.

PatientCreate (2009)

The PatientCreate web service allows you to create patients. You can have a custom or external application provide basic demographics such as name, sex, date of birth, and Social Security number (SSN) to this service, along with the user and login department. The web service creates the patient in the Epic database and then returns the patient's demographic information as entered in the new record as well as Identity IDs that were created for the patient. This service assumes that duplicate checking has already completed. Note that the web service respects the requirements your organization uses for patient creation. You might have decided to require the date of birth, gender, and SSN for new patients, in which case the web service won't create patients if that information isn't populated.

PatientCreate (2012)

The PatientCreate web service allows you to create patients. You can have a custom or external application provide basic demographics such as name, sex, date of birth, and Social Security number (SSN) to this service, along with the user (passed in the header) and login department. The web service creates the patient in the Epic database and then returns the patient's demographic information as entered in the new record as well as Identity IDs that were created for the patient.T his service assumes that duplicate checking has already completed. Note that the web service respects the requirements your organization uses for patient creation. You might have decided to require the date of birth, gender, and SSN for new patients, in which case the web service won't create patients if that information isn't populated. This is an external service intended to be used by third parties.

PatientLookup (2005)

The PatientLookup web service returns a list of patients with their demographics elements that match the given search elements. This service can be invoked from a web application where the user needs to perform a patient search with certain criteria and then select that patient, get his home ID and deployment, and continue in the selected workflow. The patient search is performed using one of two matching algorithms as defined in the searchType attribute. The default mechanism is to use the Identity duplicate search mechanism. This mechanism employs an algorithm to weigh each of the fields passed in, where the relative weight of data can be set on the database server. If the total weight of all the fields reaches a pre-defined threshold, the patient is selected. The Foundations search mechanism identifies patients by name, partial name, or ID. The other fields passed in are used as filters to further refine the search.

PatientLookup (2009)

The PatientLookup web service returns a list of patients with their demographics elements that match the given search elements. This service can be invoked from a web application where the user needs to perform a patient search with certain criteria and then select that patient, get his home ID and deployment, and continue in the selected workflow. The patient search is performed using one of two matching algorithms as defined in the searchType attribute. The default mechanism is to use the Identity duplicate search mechanism. This mechanism employs an algorithm to weigh each of the fields passed in, where the relative weight of data can be set on the EMPI deployment. If the total weight of all the fields reaches a pre-defined threshold, the patient is selected. The Foundations search mechanism identifies patients by name, partial name, or ID. The other fields passed in are used as filters to further refine the search. The result returned is a list of zero or more patients that match the search along with a large array of demographics fields.

PatientLookup (2012)

The PatientLookup web service returns a list of patients and associated demographic information that match the given search criteria. This version of the service is designed to replace the Summer 2009 version of the PatientLookup service.

PatientLookup (2013)

The PatientLookup2 web service returns a patient with associated demographic information that match the given search criteria if and only if there is a unique match. This is an external web service intended to be used by third parties.

EVS

CompleteRequest

This web service is designed to mark an environmental service (EVS) cleaning request as complete.

EndShift

This web service is designed to end shift and log out for a housekeeper.

GetEVSCategoryInfo

This web service is designed to return category information from the EVS Hold Reason and the EVS Delay Reason which are both required to interact with Environmental Services (EVS) cleaning requests.

GetHousekeeperInfo

This web service is designed to get the current Environmental Services cleaning requests for a particular housekeeper.

GetHousekeeperLoginInfo

This web service is designed to return the login information for a housekeeper so a programmer would know which records and categories could be used with the EVS start shift web service.

GoOffBreak

This web service is designed to mark a housekeeper as off break.

GoOnBreak

This web service is designed to put a housekeeper on break.

MarkInProgress

This web service is designed to mark an environmental service (EVS) cleaning request as in progress.

PutRequestOnDelay

This web service is designed to accept Environmental Services (EVS) cleaning requests and mark them as Delayed.

PutRequestOnHold

This web service is designed to accept Environmental Services (EVS) cleaning requests and mark them as Hold.

StartShift

This web service is designed to start a shift for a housekeeper in Grand Central's Environmental Services (EVS) module.

FHIR

AllergyIntolerance.Create (STU3)

This web service returns data about an allergy or intolerance to a specific substance associated with one patient. The AllergyIntolerance resource can also accommodate creating allergies by adding them to the "holding tank" that drives the EpicCare Reconcile Outside Data Activity. You can also search by ID and by patient, allowing it to return a list of allergies.

AllergyIntolerance.Read (DSTU2)

This web service returns data about an allergy or intolerance to a specific substance associated with one patient. The AllergyIntolerance resource can also accommodate search by ID and by patient, allowing it to return a list of allergies. If a patient has no active allergies, an AllergyIntolerance resource will be returned indicating whether the patient's allergies have never been reviewed (are not on file), or if they have been reviewed and it has been determined that they have no known allergies.

AllergyIntolerance.Read (STU3)

This web service returns data about an allergy or intolerance to a specific substance associated with one patient. The AllergyIntolerance resource can also accommodate creating allergies by adding them to the "holding tank" that drives the EpicCare Reconcile Outside Data Activity. You can also search by ID and by patient, allowing it to return a list of allergies.

AllergyIntolerance.Search (DSTU2)

Returns data about an allergy or intolerance to a specific substance associated with one patient. The AllergyIntolerance resource can also accommodate search by ID and by patient, allowing it to return a list of allergies. If a patient has no active allergies, an AllergyIntolerance resource will be returned indicating whether the patient's allergies have never been reviewed (are not on file), or if they have been reviewed and it has been determined that they have no known allergies.

AllergyIntolerance.Search (STU3)

This web service returns data about an allergy or intolerance to a specific substance associated with one patient. The AllergyIntolerance resource can also accommodate creating allergies by adding them to the "holding tank" that drives the EpicCare Reconcile Outside Data Activity. You can also search by ID and by patient, allowing it to return a list of allergies.

Appointment.Read (STU3)

With an appointment FHIR ID, this web service returns up-to-date appointment information.

Binary.Read

The Binary read interaction enables the look up of a binary resource by a constant server ID. The read interaction allows clients to store only the server ID, and with a single request, retrieve the most up-to-date binary content. Read interactions typically begin with a client having previously established a relationship, often through querying for DocumentReference resources through the search interaction.

CarePlan.Read

The FHIR CarePlan resource is a broad container for summarizing the plan of treatment for a patient. It includes links to the Condition resource (the patient's long term Problem List) and the Goal resource (the patient's longitudinal goals) as well as in-line detail about upcoming appointments, referral orders, and upcoming orders. This resource is designed for stating specific activities related to a single patient, rather than generic protocols for condition treatment. This is a patient-level resource, so a patient always has exactly one longitudinal care plan, which contains the most up-to-date information regarding their care. The read interaction enables the lookup of a care plan resource by a constant server ID. The read interaction allows clients to store only the server ID, and with a single request, retrieve the most up-to-date information about a procedure.

CarePlan.Search

The FHIR CarePlan resource is a broad container for summarizing the plan of treatment for a patient. It includes links to the Condition resource (the patient's long term Problem List) and the Goal resource (the patient's longitudinal goals) as well as in-line detail about upcoming appointments, referral orders, and upcoming orders. This resource is designed for stating specific activities related to a single patient, rather than generic protocols for condition treatment. This is a patient-level resource, so a patient always has exactly one longitudinal care plan, which contains the most up-to-date information regarding their care. The

read interaction enables the lookup of a care plan resource by a constant server ID. The search endpoint requires a patient ID, and is otherwise not filterable.

Condition.Create (STU3)

This web service retrieves condition (diagnosis) data from a patient's chart. This includes any data found in the patient's problem list across all encounters. This resource can be queried by a combination of patient ID and status.

Condition.Read (DSTU2)

This web service retrieves condition (diagnosis) data from a patient's chart. This includes any data found in the patient's problem list across all encounters. This resource can be queried by a combination of patient ID and status.

Condition.Read (STU3)

This web service retrieves condition (diagnosis) data from a patient's chart. This includes any data found in the patient's problem list across all encounters. This resource can be queried by a combination of patient ID and status.

Condition.Search (DSTU2)

This web service retrieves condition (diagnosis) data from a patient's chart. This includes any data found in the patient's problem list across all encounters. This resource can be queried by a combination of patient ID and status.

Condition.Search (STU3)

This web service retrieves condition (diagnosis) data from a patient's chart. This includes any data found in the patient's problem list across all encounters. This resource can be queried by a combination of patient ID and status.

Device.Read

This web service describes information about durable, manufactured medical items. The Epic implementation of this resource currently supports only implantable medical devices. The read interaction enables the look up of an implantable device resource by a constant server ID. The read interaction allows clients to store only the server ID, and with a single request, retrieve the most up-to-date device information for an implantable device. Read interactions typically begin with a client having previously established a relationship, often through querying for devices through the search interaction.

Device.Search

The FHIR Device resource describes information about durable, manufactured medical items. The Epic implementation of this resource currently supports only implantable medical devices. The search interaction enables the client to query for implantable devices based on a specified set of information. The Device Search endpoint allows clients to establish an identifier for an implantable device without previously receiving unique identification from the server for the device.

DiagnosticReport.Read

The DiagnosticReport resource is used to obtain information about a diagnostic service performed on a patient. Currently, Epic supports only laboratory reports. The read interaction enables the look up of a

DiagnosticReport resource by a constant server ID. The read interaction allows clients to store only the server ID, and with a single request, retrieve the most up-to-date information about a diagnostic procedure. Read interactions typically begin with a client having previously established a relationship, often through querying for patients through the search interaction.

DiagnosticReport.Search

The DiagnosticReport resource obtains information about a diagnostic service performed on a patient. Currently, only laboratory reports are supported. The search interaction enables the client to query for data and observations for a specified laboratory procedure for a given patient.

DocumentReference.Read

The FHIR DocumentReference resource describes information about a document. The read interaction enables the look up of a DocumentResource resource by a constant server ID. The read interaction allows clients to store only the server ID, and with a single request, retrieve the most up-to-date DocumentReference information on a document. Read interactions typically begin with a client having previously established a relationship, often through querying for DocumentReferences through the search interaction.

DocumentReference.Search

The FHIR DocumentReference resource describes information about a document. The search interaction enables the client to query for documents based on a specified set of information. The DocumentReference Search endpoint allows clients to establish an identifier for a document without previously receiving unique identification from the server for the immunization.

Encounter.Read (STU3)

The Encounter resource defines the setting where patient care takes place. This includes ambulatory, inpatient, emergency, home health, and virtual encounters. You shouldn't use the Encounter resource to store upcoming appointment information. Use the Appointment resource instead.

Encounter.Search (STU3)

The Encounter resource defines the setting where patient care takes place. This includes ambulatory, inpatient, emergency, home health, and virtual encounters.You shouldn't use the Encounter resource to store upcoming appointment information. Use the Appointment resource instead.

FamilyMemberHistory.Read

This web service returns the current status, age, and medical and surgical history of relatives related to a specific patient.

FamilyMemberHistory.Search

Returns the medical and surgical history of a patient's relatives using RESTful URLs. For now, Epic supports only Search by FHIR Patient ID, which returns all FamilyMemberHistory resources associated with a single patient.

Goal.Read

The FHIR Goal resource defines objectives for a patient based on a current condition or recent procedure. The goal can be long-term, such as targeting a specific HgbA1c level after a diabetes diagnosis, or shorter-

term such as changing wound dressings routinely following a procedure.The read interaction enables the lookup of a Goal resource by a constant server ID. The read interaction allows clients to store only the server ID, and with a single request, retrieve the most up-to-date information about a Goal. Read interactions typically begin with a client having previously established a relationship, often through querying for Goals through the search interaction.

Goal.Search

The FHIR Goal resource defines objectives for a patient based on a current condition or recent procedure. The goal can be long-term, such as targeting a specific HgbA1c level after a diabetes diagnosis, or shorter-term such as changing wound dressings routinely following a procedure. The search interaction enables the client to query for goals based on status or goal type. The search endpoint requires a patient ID. Goals are not filterable by active date.

Immunization.Read

The FHIR Immunization resource provides a patient's immunizations, including vaccine and vaccine administration details.The read interaction allows a client to retrieve an Immunization resource by a constant server ID. This allows clients to store only the server ID and retrieve the most up-to-date vaccine and administration information for an immunization with a single request.

Immunization.Search

The FHIR Immunization resource provides a patient's immunizations, including vaccine and vaccine administration details.The search interaction allows the client to query for a patient's immunizations. The Immunization Search endpoint allows a client to retrieve an identifier for an immunization.

Medication.Read (DSTU2)

This web service retrieves information about a specific medication. It serves as a matter of identifying an item from a list and then conveying a reference for the item selected either into a patient related resource or to other applications.

Medication.Read (STU3)

The FHIR Medication resource represents medication information for a Medication order.

MedicationOrder.Read

This web service retrieves medication orders for both supply of the medication and the instructions for how the medication should be taken by or given to the patient.

MedicationOrder.Search

This web service retrieves medication orders for both supply of the medication and the instructions for how the medication should be taken by or given to the patient.

MedicationRequest.Read (STU3)

The read interaction enables the look up of a MedicationRequest resource by a constant server ID. The read interaction allows clients to store only the server ID, and with a single request, retrieve the most up-to-date result data on a patient. Read interactions typically begin with a client having previously established a relationship, often through querying for MedicationRequests through the search interaction.

MedicationRequest.Search (STU3)

You can use the search interaction to query for medication orders based on a patient and optionally status or category.

MedicationStatement.Read (DSTU2)

The MedicationStatement resource defines medications being consumed by a patient. The MedicationStatement resource is a high-level summary of medications being used, reported by patients or care providers. It is not a listing of specific prescriptions or administrations, which instead are available in the MedicationOrder and MedicationAdministration resources, respectively.

MedicationStatement.Read (STU3)

The MedicationStatement resource represents all medications a patient is taking, either ordered in the EMR or reported externally by another organization or the patient. The medicationStatement resource information reflects the details about how the patient is actually taking the medication even if it differs from what was ordered.

MedicationStatement.Search (DSTU2)

The MedicationStatement resource defines medications being consumed by a patient. The MedicationStatement resource is a high-level summary of medications being used, reported by patients or care providers. It is not a listing of specific prescriptions or administrations, which instead are available in the MedicationOrder and MedicationAdministration resources, respectively.

MedicationStatement.Search (STU3)

The MedicationStatement resource represents all medications a patient is taking, either those ordered in the EMR or reported externally by another organization or the patient. The medicationStatement resource information reflects the details about how the patient is actually taking the medication even if it differs from what was ordered. The search interaction enables you to query for medication orders based on a patient and optionally status or category. You can use the Patient Search endpoint to establish an identifier for a patient without previously receiving unique identification from the server for the patient.

Observation.Create (Vitals) (STU3)

The FHIR Observation resource defines measurements and assertions about a patient, including vital signs, laboratory data, imaging results, devices measurements, clinical assessment tools, personal characteristics, social history, and core characteristics. A create request sends an Observation resource through the request body to the server. An error is returned if a reading already exists. If an ID is included in the request, an error is returned. The server assigns an ID to the newly created resource.

Observation.Read (Labs) (DSTU2)

The Observation resource contains simple information about a patient, device, or other subject including device measurements, vital signs, smoking status, and other comments. The read interaction looks up Observation resources by a constant server ID. This enables clients to store only the server ID and retrieve the most up-to-date information on an observation with a single request. Additionally, the read interaction responds to any reference to an Observation resource that exists in the output of any other resources that reference an Observation resource. Note that this resource doesn't support retrieving information for imaging studies or procedures. This service also does not respect the same filtering as MyChart.

Observation.Read (Labs) (STU3)

The FHIR Observation resource defines measurements and assertions about a patient, including vital signs, laboratory data, imaging results, devices measurements, clinical assessment tools, personal characteristics, social history, and core characteristics.

Observation.Read (Smoking History) (DSTU2)

The Observation resource contains simple information about a patient, device, or other subject including device measurements, vital signs, smoking status, and other comments. The read interaction looks up Observation resources by a constant server ID. This enables clients to store only the server ID and retrieve the most up-to-date information on an observation with a single request. Additionally, the read interaction responds to any reference to an Observation resource that exists in the output of any other resources that reference an Observation resource. Note that this resource doesn't support retrieving information for imaging studies or procedures. This service also does not respect the same filtering as MyChart.

Observation.Read (Vitals) (DSTU2)

This web service retrieves vital sign data from a patient's chart. This includes any data found in the patient's flowsheets across all encounters. This resource can be queried by a combination of patient ID and vital sign LOINC codes. Additionally, queries can be further defined with a date or date range. This resource leverages paging to return multiple results at a time. This service also does not respect the same filtering as MyChart.

Observation.Read (Vitals) (STU3)

The FHIR Observation resource defines measurements and assertions about a patient, including vital signs, laboratory data, imaging results, devices measurements, clinical assessment tools, personal characteristics, social history, and core characteristics.

Observation.Search (Labs) (DSTU2)

The Observation resource contains simple information about a patient, device, or other subject including device measurements, vital signs, smoking status, and other comments. Note that this resource doesn't support retrieving information for imaging studies or procedures. This service also does not respect the same filtering as MyChart.

Observation.Search (Labs) (STU3)

The FHIR Observation resource defines measurements and assertions about a patient, including vital signs, laboratory data, imaging results, devices measurements, clinical assessment tools, personal characteristics, social history, and core characteristics.

Observation.Search (Smoking History) (DSTU2)

The Observation resource contains simple information about a patient, device, or other subject including device measurements, vital signs, smoking status, and other comments.Note that this resource doesn't support retrieving information for imaging studies or procedures. This service also does not respect the same filtering as MyChart.

Observation.Search (Vitals) (DSTU2)

This web service retrieves vital sign data from a patient's chart. This includes any data found in the patient's flowsheets across all encounters. This resource can be queried by a combination of patient ID and vital sign

LOINC codes. Additionally, queries can be further defined with a date or date range. This resource will leverage paging to return multiple results at a time. During the development process we will use benchmark testing to determine what a reasonable upper limit is to limit performance issues. This service also does not respect the same filtering as MyChart.

Observation.Search (Vitals) (STU3)

The FHIR Observation resource defines measurements and assertions about a patient, including vital signs, laboratory data, imaging results, devices measurements, clinical assessment tools, personal characteristics, social history, and core characteristics.

Patient.Read

This web service retrieves patient demographic information from a patient's chart. Patients can be looked up by a single encrypted ID representing the resource or by a search on a number of parameters. This service also does not respect the same filtering as MyChart.

Patient.Search

This web service retrieves patient demographic information from a patient's chart. Patients can be looked up by a single encrypted ID representing the resource or by a search on a number of parameters. This service also does not respect the same filtering as MyChart, with the exception of the careProvider parameter.

Practitioner.Read (DSTU2)

This web service returns data about a practitioner given a FHIR ID for a direct read.

Practitioner.Read (STU3)

You can use the read interaction to look up a Practitioner resource by a constant server ID. The read interaction allows you to store only the server ID, and with a single request, retrieve the most up-to-date role information on a Practitioner. Read interactions typically begin with a client having previously established a relationship.

Practitioner.Search

The FHIR Practitioner resource is defined as a person who is directly or indirectly involved in the provisioning of healthcare. The Practitioner resource can provide information about a healthcare provider, such as activities, responsibilities, demographics, and other administrative information.

Procedure.Read

The FHIR Procedure resource defines an activity performed on or with a patient as part of the provision of care. It corresponds with surgeries and procedures performed, including endoscopies and biopsies, as well as less invasive actions like counseling and physiotherapy. This resource is designed for a high-level summarization around the occurrence of a procedure, and not for specific procedure log documentation. When searching, only completed procedures are returned. The read interaction enables the lookup of a Procedure resource by a constant server ID. The read interaction allows clients to store only the server ID, and with a single request, retrieve the most up-to-date information about a procedure. Read interactions typically begin with a client having previously established a relationship, often through querying for Procedures through the search interaction.

Procedure.Search

The FHIR Procedure resource defines an activity performed on or with a patient as part of the provision of care. It corresponds with surgeries and procedures performed, including endoscopies and biopsies, as well as less invasive actions like counseling and physiotherapy.This resource is designed for a high-level summarization around the occurrence of a procedure, and not for specific procedure log documentation. When searching, only completed procedures are returned.

Schedule.Read (STU3)

The Schedule resource is the link from a slot to a practitioner and location for an appointment.

Imaging

GetStudies (2008)

Note: A newer version of this web service is available. We recommend that you use the GetStudies service instead. The GetStudies service is a synchronous service. This service can be used with a third-party system to interpret the data and query the following reports or work lists:

- Status Report
- Reading Work List
- Signing Work List
- Protocol Work List

It retrieves the list of studies that meet the criteria based on report info records. A third-party system can then use this list to maintain the list of studies for a particular reading physician or work as a report to get studies that meet any particular criteria. You can modify the report settings of any of the report or work lists above to set your criteria and then pass the report ID to the GetStudies service. You can use these reports to provide clinical data in non-Epic applications.

GetStudies (2014)

The GetStudies service is a synchronous service. This service can be used with a third-party system to interpret the data and query the following reports or work lists:

- Status Report
- Study History Report
- Ancillary Orders Report
- Reading Work List
- Signing Work List
- Protocol Work List

The service retrieves the list of studies that meet the record criteria in report info records. A third-party system can then use this list to maintain the list of studies for a particular reading physician or work as a report to get studies that meet any particular criteria. You can modify the report settings of any of the report or work lists above to set your criteria and then pass the report ID to the GetStudies service. You can use these reports to provide clinical data in non-Epic applications.

Managed Care

BatchResultsAckSubmitTransaction

This web service accepts incoming acknowledgements of batch ANSI 5010 X12 results.

BatchResultsRetrievalTransaction

This web service responds with the results of batch ANSI 5010 X12 submissions.

RealTimeTransaction

This web service responds to incoming real-time ANSI 5010 X12 inquiries.

Orders

AnnotateOrders

File the Clinical Decision Support (CDS) score, CDS session ID, free-text answers to order-specific questions, and the indications of use to in-process orders before they are signed.

DiscontinueMedicationOrder

This service can discontinue an ambulatory medication order. The service verifies that the user being passed in has the appropriate security to discontinue the order. The service also verifies that the order has not been previously discontinued. The patient associated with the order must be the same as the patient whose records are passed in through the service. The service requires a reason for discontinuation.

PlaceOrdersUsingTemplate

This service allows pended orders to be placed in an ambulatory context using templates. A complete ambulatory order record is a complex interaction of several constituents, like metadata, required to write the order, order validation, drug utilization review checks, diagnosis associations, and order routing. Most organizations have automated many of these processes. This service was designed to take advantage of those automations. For example, physicians can build templates to capture the metadata necessary to write orders, and order transmittal rules determine the routing of orders. The orders must be signed within EpicCare, which activates automated order validation, diagnosis associations, and interaction alerts. Then the order is routed based on transmittal rules. Several orders can be placed for a single patient using this service. An existing patient encounter can be specified in the service, or the service can be used to create a new patient encounter where all orders that are part of the request are part of the newly created encounter. The service returns the order identifiers created as part of this call or any errors that were generated as part of order creation. It returns the encounter identifier if a new patient encounter was created.

Patient

AddAllergy

This web service can be used to add an allergy to a patient's chart.

AddDiagnoses

This web service files visit diagnosis information. For each diagnosis, the user can specify the diagnosis ID, description or display name, comments, qualifier, and chronicity. The user can also specify whether the first diagnosis in the list of diagnoses being filed is the primary diagnosis.

AddDiagnosesToMedicalHistory

This web service files diagnosis information to the medical history.

AddDxAssociation

This service adds a diagnosis association to an order.

AddFlowsheetValue

This service receives a patient, contact, user, flowsheet row, value, comment, instant, and flowsheet template. It then files the flowsheet value and comment to the row on the template for the patient contact. To use this service, you must have the IP AddFlowsheetValue Web Service license, which is included in the standard EpicCare Inpatient, EpicCare Ambulatory, and ASAP licenses.

AddLOS

This web service can be used to file Level Of Service (LOS) code and related information for an outpatient visit. Additional EM codes can also be filed. The LOS and EM codes can be associated with existing diagnoses as well as new diagnoses that will be filed to the visit.

AddProblems

This web service adds the specified diagnoses to the patient's problem list.

AddProcedureToSurgicalHistory

This web service adds a new record to the patient's surgical history.

AddToProblemList

This web service adds one or more problems to a patient's problem list. Can also be used to file hospital problems.

AssignVisitAccountAndCoverage

This web service assigns the provided guarantor account and coverage as the visit account and coverage for a provided contact and patient, and it returns the copay that will be due.

CreateDisclosure

This web service imports disclosure data and creates a Third Party Disclosure record in Epic.

CreateRelease

This web service allows release requests created in a third-party copy vendor system to automatically copy into Hyperspace so ROI clerks don't have to manually enter information in both systems.

EditProblems

This web service can edit the patient's problem list based on the user's input.When using this web service, you should first get the current information for this problem using the GetActiveProblems web service. When using the EditProblems service, you must pass all of the elements back. If you send only the elements you want to change, the other elements will be saved as null.

GetActiveProblems

This web service gets the list of active problems for a patient.

GetCensusByUnit (2012)

This service returns the census information for a specified unit.

GetCensusByUnit (2014)

This service returns the census information for a specified unit.

GetFamilyHistory

Given patient ID and ID type, this service returns patient's family history.

GetGenericRegNoAddCategory

The web service will take the following inputs:

- PatientID
- IDType
- RegistrationItems

After validating the inputs, the system aquires the internal Chronciles ID based on the patient ID and ID type. After getting the patient, the web service looks up the values for the input items from the items in the RegistrationItem input parameter. The web service then returns the category information from the item for the patient and send it back in the response.

GetGuarantorsAndCoverages (2012)

This web service receives a patient ID and type and user ID and type and responds with a list of guarantor accounts and coverages available for selection on a visit for the current day for that patient.

GetGuarantorsAndCoverages (2014)

This web service receives a patient ID, user ID, and department ID, and responds with a list of guarantor accounts and coverages available for selection on a visit for the current day for that patient, as well as relevant information about those guarantors and coverages. This web service returns effective guarantors with at least one current or future effective coverage, and inactive guarantors with at least one current or future effective coverage. This web service can be used in place of GetGuarantorsAndCoverages so that end users can see all current and future effective coverages. The previous web service would not return effective coverages attached to inactive accounts. This was problematic for patients over the age of 18 who were still on their parent's coverage.

GetMedicalHistory

Given patient ID and ID type, this service returns patient's medical history.

GetPatientContactInformation

Gets information about an existing contact ID. Contacts are limited to contacts available to the user in Chart Review and Media Manager.

GetPatientContacts (2011)

Gets a list of patient contacts. Contacts are limited to contacts available to the user in Chart Review and Media Manager.

GetPatientContacts2

Gets a list of patient contacts. This web service is similar to GetPatientContacts, but uses Break-the-Glass security checks to determine which contacts are returned.

GetPatientDemographics (2010)

Given patient ID and ID type, this service returns patient's demographics information.

GetPatientDemographics (2015)

Given a patient ID and ID type, this service returns the patient's demographic information.

GetPatientDemographics (2017)

Given a patient ID and ID type, this service returns the patient's demographic information.

GetPatientIdentifiers (2010)

Given patient ID and ID type, this web service returns all patient identifiers.

GetPatientIdentifiers (2012)

This service returns the list of active IDs as well as the list of historical IDs for a patient. An active ID must be used in the web service request.

GetPatientIdentifiers (2015)

This service returns the list of active IDs and historical IDs for a patient. An active ID must be used in the web service request.

GetPatientLocation

This web service provides the in-house location and admission information of admitted patients.

GetPatientLocationByVisit

This web service returns basic patient and visit information needed to produce a label.

GetPatientPhoto (2014)

This web service returns the patient's profile photo that is stored in his patient record.

GetPatientPhoto (2016)

This web service returns the patient's profile photo that is stored in his patient record). This service is similar to the 2014 GetPatientPhoto web service, with the exception that it can resize the photo returned and includes more photo metadata.

GetPersonInfo

This web service provides a way for downstream systems incapable of receiving messages from our outgoing ADT feed to query Epic for information related to a patient. The response message includes:

- Demographic information
- Information about emergency contacts
- Information about patient's PCP
- Information about open (or recent) hospital accounts (Danish kontakts)

GetSurgicalHistory

Given patient ID and ID type, this service returns patient's surgical history.

RemoveDiagnosesFromMedicalHistory

This web service removes a record in a patient's medical history.

RemoveProcedureFromSurgicalHistory

This web service removes a procedure from a patient's surgical history.

UpdateDiagnosesInMedicalHistory

This web service updates an existing medical history record.

UpdatePatientCareTeam

This web service allows the user to update a patient's care team.

UpdatePatientDemographics (2012)

This service receives a patient ID (and type), user ID (and type), and a patient's demographic information, saving any changes.

UpdatePatientVerification

This web service attempts to verify a given patient for a given encounter. It returns any errors and/or warnings that occur.

UpdateProcedureInSurgicalHistory

This web service updates an existing record in a patient's surgical history.

UpdateRelease

This web service updates release request information in Epic based on changes entered in a third-party system so users don't have to manually copy changes back into Epic. This means that if an ROI clerk modifies information in an already-created release request, the system updates the copied request in Epic to keep the versions in line.

VerifyPatient

This web service takes a patient ID and ID type and a list of demographic fields and returns a Boolean value indicating whether the information in the message matches the information on patient's record.

Patient Access

ActivatePatient (2004)

This service provides a standard way for external systems to either activate or deactivate an existing MyChart account. This service is invoked by an external system when the individual's access to the external system is either enabled or disabled. This service should be used to keep the account status (enabled or disabled) in agreement between the external system and MyChart. Note: This web service cannot be used to create a MyChart account. Other services, such as CreateAccount, CreateNonPatientWebAccount, and CreatePatientWebAccount, are available for this purpose.

ActivatePatient (2009)

This service provides a way for external systems to either activate or deactivate an existing MyChart account. This service can be invoked by an external system when the individual's access to the external system is either active or inactive. This service should be used to keep the account status (active or inactive) in agreement between the external system and MyChart. Note: This web service cannot be used to create a MyChartaccount. Other services, such as CreateAccount, CreateNonPatientWebAccount, and CreatePatientWebAccount, are available for this purpose.

CancelAppointment (2005)

This service provides a standard way for external systems to cancel an appointment for a patient. This service would be invoked by an external system after a call to the GetFutureAppointments service to retrieve a patient's future appointments along with the unique identifier for each appointment. This service is invoked if the patient takes action to cancel a future appointment on the external system, or the external system makes an automated determination to cancel an appointment.

CancelAppointment (2012)

This web service is used to cancel appointments that are designated for open scheduling. To cancel an appointment using this service, all of the following must be true:

- The provider is enabled for open scheduling.
- The department is configured for open scheduling.
- The visit type is allowed for open scheduling in the given department.
- The appointment must have been scheduled by the same user specified in the authentication header data.
- The given appointment must have only one audit entry and that entry must be of type MADE ON.

To cancel appointments not associated with open scheduling, use one of the other CancelAppointment web services.

CancelAppointment (2014)

This web service is used to cancel appointments from a patient context. It respects MyChart configuration and security for direct cancellation.

CheckAccessCode (2008)

This service provides an external system the means to validate a MyChart user's access code, or simply to verify that such a code exists for that individual. The Web service accepts required parameters of patient ID and ID type and an optional access code.If the access code is provided, this Web service returns whether the provided code matches the one associated with the MyChart user. In this case, it also returns whether the code is expired. If the access code is not provided, this web service returns whether the individual has a valid, unexpired access code. This web service can be used for both patients and non-patient proxies.

CheckAccessCode (2009)

This service provides an external system the means to validate a MyChart user's access code, or simply to verify that such a code exists for that individual. The Web service accepts required parameters of patient ID and ID type and an optional access code.If the access code is provided, this Web service returns whether the provided code matches the one associated with the MyChart user. In this case, it also returns whether the code has expired. If the access code is not provided, this Web service returns whether the individual has a valid, unexpired access code. This web service can be used for both patients and non-patient proxies.

ClearAccessCode (2008)

This service provides an external system the means to clear a MyChart user's access code.

ClearAccessCode (2009)

This service provides an external system the means to clear a patient's MyChart access code.

CreateAccount (2004)

This service creates a Patient Access Accounts record (without a password) for a given patient, which allows future access to the system. This service is typically called by an external patient portal application to MyChart that has created a new account in its system, or when a user in the external patient portal has been validated for access to information provided by MyChart.

CreateAccount (2009)

This is the WCF version of the CreateAccount service. This web service creates a Patient Access Account record (without a password) for a given patient. This service is typically used to create patient MyChart accounts when MyChart is used in a Single Sign-On (SSO) configuration.

CreateNonPatientWebAccount

Creates a non-patient MyChart account, often used by parents of patients at a pediatric organization.

CreatePatientWebAccount (2011)

Creates a MyChart account for an existing patient record. Equivalent to going through the signup process in MyChart, but done programmatically.Note that each time this web service is called, the Terms and Conditions are cleared out.

CreatePatientWebAccount (2017)

This web service creates a MyChart account for an existing patient record. It is equivalent to going through the signup process in MyChart, but done programmatically. It exposes an option to not update notification

preferences for the patient, when used to update the password on an existing MyChart account record.Note that each time this web service is called, the Terms and Conditions are cleared out.

CreateProxyOnlyAccount

This web service create a MyChart account for an existing patient, and mark it as a proxy-only account. This is an account (such as a child's) that cannot log in directly, but can be accessed by another MyChart user (such as a parent) once a relationship is established.

DeleteProxyRelationship (2005)

This service takes in the proxy patient ID and the subject patient ID and deletes the proxy relationship between the two patients if one exists. This service would typically be invoked by an external system that is providing administrative staff an alternative to managing proxy information through the Epic Hyperspace application.

DeleteProxyRelationship (2009)

This service takes in the proxy patient ID and the subject patient ID and deletes the proxy relationship between the two patients if one exists. This service would typically be invoked by an external system that is providing administrative staff an alternative to managing proxy information through the Epic Hyperspace application.

eCheckIn

This web service updates the status of online check-in. It allows individual steps to be updated (such as demographics verification), as well as the overall status of check in. Additionally, it allows supplementary co-pay data to be collected (transaction information along with what payment option was taken, either pay at home or pay at the clinic).

GetAlerts (2004)

This version of the GetAlerts web service can be invoked to get alerts for a MyChart patient. The list of alerts varies, depending upon the list configured for the system and the security available to the patient. Different security settings might apply to proxy access. This service should be invoked after the patient has been authenticated by the external system, or to display alerts to a proxy for a particular patient.

GetAlerts (2006)

This version of the GetAlerts web service can get alerts for a MyChart patient or for a proxy on behalf of a MyChart patient. The list of alerts varies depending upon the list configured for the system and the security available to the patient. Different security settings might apply to proxy access. This service should be invoked after the patient has been authenticated by the external system, or to display alerts to a proxy for a particular patient.

GetAlerts (2009)

This version of the GetAlerts web service can be invoked to get alerts for a MyChart patient or for a proxy on behalf of a MyChart patient. The list of alerts varies, depending upon the list configured for the system and the security available to the patient. Different security settings might apply to proxy access. This service should be invoked after the patient has been authenticated by the external system, or to display alerts to a proxy for a particular patient.

GetAuthorizedFeatures (2005)

This second version of the GetAuthorizedFeatures Web service supports proxy access. The GetAuthorizedFeatures service gets the list of features that either a MyChart patient or a MyChart user acting on behalf of a patient (an authorized proxy) is authorized to access. This service is typically called when a patient portal application that is external to MyChart displays links to features within MyChart. The list of features that this service returns can be used to dynamically hide or make available links only to those features that the patient is authorized to access. This service should be invoked after the patient has authenticated herself to the patient portal application, but before the patient has access to links to features.

GetAuthorizedFeatures (2009)

This is the WCF version of this service.The GetAuthorizedFeatures service gets the list of features that either a MyChart patient or a MyChart proxy acting on behalf of the patient is authorized to access. This service is typically called when a patient portal application displays links to MyChart features. The list of features that this service returns can be used to dynamically determine which MyChart links to display. This service should be invoked after the patient has authenticated herself to the patient portal application, but before the patient has access to links to features.

GetCenters

This service provides the caller with a list of centers where the patient can schedule an appointment. This service would typically be invoked within the appointment scheduling workflow. The service can be used in the scenario where the external system needs to provide the patient with the option of choosing the center he wants to visit for an appointment after choosing the type of visit that he is scheduling.

GetCurrentHealthIssues (2014)

This web service is an extension of the 2011 version of GetCurrentHealthIssues. It allows an external system to retrieve the list of current health issues for a patient, as well as ICD codes and code sets. We anticipate you might use the ICD codes for content linking. As with the 2011 version, the list of current health issues returned by this service matches what is displayed in MyChart.

GetEmailAddress (2004)

This service provides an external system with a way to retrieve the primary e-mail address for a MyChart patient or non-patient. This service is typically invoked to ensure that the e-mail address on file in Epic is consistent with the e-mail address maintained by the external system.

GetEmailAddress (2009)

This service provides an external system with a way to retrieve the primary e-mail address for a MyChart patient. This service is typically invoked to ensure that the e-mail address on file in Epic is consistent with the e-mail address maintained by the external system.

GetFutureAppointments (2005)

This service allows an external system to retrieve the list of upcoming appointments for a patient along with useful information regarding each of the appointments. This service should be invoked by an external system looking to provide the patient with access to upcoming appointments outside the MyChart application.

GetFutureAppointments (2013)

This web service will get information about future appointments. The web service will include all information that the current future appointments web service includes, along with information needed for online check-in, such as check-in status, and additional information about the upcoming appointment (department address, provider photo URL).

GetFutureAppointments (2014)

This web service returns a list of the patient's upcoming appointments, respecting MyChart configuration.

GetFutureAppointments (2017B)

This web service is an extension of the patient access GetFutureAppointments web service. It adds to the existing auto-generated version response elements to include the arrival location for a patient, if specified for the appointment department.

GetHistoricalResults

This web service retrieves historical test results available to MyChart by component records.

GetInstantActivationUser

Hyperspace users can now send an instant activation email or text to patients or non-patient proxies, which contains a URL, for a quicker MyChart signup. The user can click the URL, which contains a token to launch MyChart signup page. SSO customers who developed their own patient portal registration websites are not able to take advantage of all the functionality we have developed with instant activation. This web service allows SSO customers to send the instant activation with their own patient portal websites. Then they can use instant activation token to retrieve the identity of the patient/non-patient being signed up for MyChart. In this way, SSO customers can take advantage of all the functionality we developed for instant activation.

GetInsuranceQueryStatus

This web service takes a key and returns the status of the real-time eligibility query associated with that key.

GetMyChartSignupPatient

This web service is intended to be used by a custom patient portal signup webpage during in clinic patient portal signup. Hyperspace will launch a web browser including two query parameters, InfoID and Client. This web service will take those two query parameters as inputs and will return a set of patient IDs. The IDs can then be used with other web services to activate a patient for the patient portal. The web site launched during in clinic signup is can be configured on the MyChart Access in Hyperspace Options page in the Login and Access Configuration section of the MyChart system definitions.

GetMyChartSignupUser

Hyperspace users can begin a MyChart signup workflow to give a user (including non-patient) access to MyChart. The user will click the signup button, Hyperspace will secure, a browser will launch with the MyChart signup site, and the browser will populate with user identifying information. The user will then enter data used to identify themselves such as date of birth (if required by the setup), enter a MyChart username and password, and finish creating their MyChart account. SSO customers who have developed their own patient portal registration websites are not able to take advantage of all the functionality we have developed with the signup workflows. SSO customers can have Hyperspace secure and take them to a

custom registration page but they cannot retrieve any information on the user who is signing up. This web service allows SSO customers to retrieve the user ID of the user being signed up for MyChart based on the token and client info information passed by the web page launched by Hyperspace. Other web services can then be called to retrieve other user information pieces if needed. The web service will also return the ID and login department of the user who initiated the signup workflow. This can be used to track which departments and users are signing up the patient for the web portal.

GetNonPatientDemographics

This web service retrieves demographics information for a non-patient account.

GetOpenSlots (2006)

This is the second version of the GetOpenSlots business service. This service provides the caller with a list of time slots in which the caller can schedule an appointment for a patient. This service would be invoked after calling GetPCP or GetProviders services and possibly GetVisitTypes, and before calling ScheduleAppointment.

GetOpenSlots (2014)

This service provides the caller with a list of time slots in which the caller can schedule an appointment for a patient. The service is intended to be used by third parties.

GetPatientBalance

With this web service, third-party systems can take patient information and use the web service to gain billing information, particularly the patient's account IDs and outstanding balances. MyChart customers with a third-party billing vendor system can pass appropriate information to their billing vendor for bill pay collection.

GetPatientByAccessCode (2009)

This web service can be used by a Single Sign-On system during the MyChart account creation process. The web service is used to validate patient information required for account creation, and return the patient ID. The patient ID (and ID type) should then be stored by the SSO system to be used for subsequent web services calls, such as CreateAccount, GetAlerts, and GetAuthorizedFeatures. The web service accepts the parameters of a MyChart access code, a patient ID type (used to indicate which ID type to return if a matching patient is found), a MyChart account ID type (used to indicate which ID type to return if a matching non-patient is found) and verification data, which can include, but is not limited to, the last four digits of the social security number (SSN) and the patient's date of birth. If the web service finds a match, it returns a record containing the ID and a RecordType value indicating whether the matching record is a patient or a non-patient. The record also contains an AccessCodeExpired value indicating whether the access code has already expired.

GetPatientByAccessCode (2010)

This web service can be used by a Single Sign-On system during the MyChart account creation process. The web service is used to validate patient information required for account creation, and return the patient ID. The patient ID (and ID type) should then be stored by the SSO system to be used for subsequent web services calls, such as CreateAccount, GetAlerts, and GetAuthorizedFeatures. The web service accepts the parameters of a MyChart access code, a patient ID type (used to indicate which ID type to return if a matching patient is found), a MyChart account ID type (used to indicate which ID type to return if a

matching non-patient is found) and verification data, which can include, but is not limited to, the last four digits of the social security number (SSN) and the patient's date of birth. If the web service finds a match, it returns a record containing the ID and a RecordType value indicating whether the matching record is a patient or a non-patient. The record also contains an AccessCodeExpired value indicating whether the access code has already expired.

GetPatientDemographics (2013)

This service retrieves patient demographics in a way that's similar to how demographics are retrieved from MyChart.

GetPCP (2005)

This service provides the list of Primary Care Providers (PCPs) assigned to the patient. This service returns the PCPs assigned to the patient, as well as the departments and locations where the providers work. This service would typically be invoked to get a list of PCPs in order to schedule an appointment for a patient.

GetPCP (2009)

This is the WCF version of this service. This service provides the list of Primary Care Providers (PCPs) assigned to the patient. This service returns the PCPs assigned to the patient, as well as the departments and locations where the providers work. This service would typically be invoked to get a list of PCPs in order to schedule an appointment for a patient.

GetProviders (2005)

This service provides the caller with a list of providers with whom the patient can schedule an appointment, given a visit type and the optional centers. This service is invoked within the appointment scheduling workflow. After the patient has specified the type of visit he needs to schedule and, optionally, the center in which to schedule the appointment, this service can be called to return the list of providers with whom the patient is able to schedule the given visit type in the specified center.

GetProviders (2009)

This service provides the caller with a list of providers with whom the patient can schedule an appointment, given a visit type and the optional centers. This service is invoked within the appointment scheduling workflow. After the patient has specified the type of visit he needs to schedule and, optionally, the center in which to schedule the appointment, this service can be called to return the list of providers with whom the patient is able to schedule the given visit type in the specified center.

GetProxyInformation (2005)

This service allows an external system to retrieve proxy information for a given MyChart patient or non-patient. The proxy information has three sections:

1. MyChart users who have access to the given user's MyChart account
2. Access codes that can be used to gain access to the given user's MyChart account
3. MyChart accounts to which the given patient has proxy access.

This service is typically invoked by an external system to provide administrative staff with this information as an alternative to accessing the information through the Epic Hyperspace application. To request proxy information for a non-patient, use the MyChart account Identity ID and type.

GetProxyInformation (2009)

This is the WCF version of this service. This service allows an external system to retrieve proxy-related information for a given MyChart patient or non-patient. The proxy information has three sections:

1. MyChart users who have access to the given user's MyChart account
2. Access codes that can be used to gain access to the given user's MyChart account
3. MyChart accounts to which the given patient has proxy access.

This service would typically be invoked by an external system to retrieve proxy-related information on behalf of a MyChart user or to provide administrative staff with this information as an alternative to using Hyperspace.

GetQuestionnaireList

This web service retrieves the list of questionnaires available to a patient in MyChart. This service is proxy-aware and will enforce proxy access and MyChart security rules. The PatientID is always the ID of the subject in a proxy scenario, the source of the data. The MyChartAccountID is always the delegate, or the viewer of the data. The MyChartAccountID can be the ID for the subject when they are viewing their own information.

GetScheduleDaysForProvider (2012)

This service returns a list of "schedule days" for a provider within the given range. "Schedule days" represents a single day and then lists the openings found for the provider. If there are no slots listed, then this can be interpreted as affirmation that there are no slots. The search will not quit early, it will provide all openings for all days within the range. The scheduling slots returned by this web service must be available for open scheduling. It does not return a comprehensive list of all open times in a provider's schedule.

GetScheduleDaysForProvider (2017)

This web service performs the same functions as Epic 2017 but adds the following features:

- Allows filtering of results by a list of departments
- Allows filtering of results by a list of visit types
- Returns the patient-friendly start time for each slotReturns the arrival time for each slot

GetTestResultDetails (2014)

This service allows an external system to retrieve details of a test results for a patient including imaging addenda and scans.

GetTestResults (2015)

This service allows custom applications and patient portals to retrieve a list of test results for a patient. Additionally, it can allow patients to filter out inpatient results, pick a sort column and direction, search their test results list using keywords, and incrementally load results. Aside from this additional functionality, this web service is similar to theGetTestResults (2010) web service.

GetVisitTypes (2005)

This service provides the external system with a list of visit types that the patient can schedule. This service should be invoked within the appointment scheduling workflow. This service provides the patient with a list

of visits she can schedule. Based on which visit she selects, other services are called to schedule an appointment.

GetVisitTypes (2009)

This is the WCF version of this service. This service provides the external system with the list of visit types that the patient can schedule and the preference logic for scheduling them. This service should be invoked within the appointment scheduling workflow. Based on which visit type the patient selects, other services are called to schedule an appointment.

PostPayment

Posts a payment to a billing account. This web service is intended for patient use. It will appear as if the access granted through this service was granted to a patient regardless of how the service is used. If the patient is not MyChart active, this service will create an inactive MyChart account for them. As a result, use of this service will contribute to your organization's MyChart subscription counts.

RemoveAllWebAccountDevices

This web service will clear all secondary login devices associated with a MyChart account. An example of a secondary login device would be configuring iOS passcode or Touch ID in MyChart Mobile. Organizations using single sign on (SSO) can clear the devices when a user account is deactivated.

ScheduleAppointment (2006)

This is the second version of the ScheduleAppointment web service. This service enables external systems to allow patients to schedule their own appointments. This service is invoked by an external system after the patient is presented with a list of available time slots returned by the GetOpenSlots service. If you need to enable an external system to allow employees to schedule appointments on behalf of patients, use the Cadence ScheduleAppointment web service.

ScheduleAppointment (2012)

This web service is used to schedule appointments that are designated for open scheduling. It is intended to allow you to interface with third-party open scheduling providers.This web service checks that the given provider is enabled for open scheduling, the department is configured for open scheduling, and the visit type is enabled for open scheduling in the given department.

ScheduleAppointment (2014)

This web service is used to schedule appointments from a patient context. It respects MyChart configuration and security for direct scheduling.

ScheduleAppointmentWithInsurance (2014)

This web service is an updated version of the ScheduleAppointment web service that also contains insurance collection functionality. It is intended to allow you to interface with third-party open scheduling providers.This web service checks that the given provider is enabled for open scheduling, the department is configured for open scheduling, and the visit type is enabled for open scheduling in the given department.

ScheduleAppointmentWithInsurance (2018)

This web service schedules an appointment within the context of Open Scheduling and allows submission of the scheduled patient's insurance information in the same web service call.

SetLoginID

This web service sets the login ID (also called the username) for an existing MyChart account. You can use it be used for a patient or non-patient MyChart account.

SetPatientDeclinedMyChart

Given a patient identifier, this web service marks that the patient has declined MyChart.

SetProxyRelationship (2005)

This service allows the service caller to set up new proxy relationships between two patients or modify previously existing proxy relationships between two patients. If a proxy relationship exists between two patients and this service is invoked, the existing proxy relationship is updated.

SetProxyRelationship (2009)

This service allows the service caller to set up new proxy relationships between two patients or modify previously existing proxy relationships between two patients. If a proxy relationship exists between two patients and this service is invoked, the existing proxy relationship is updated.

SubmitInsurance

This web service allows the submission of a patient's insurance items.

SubmitInsurance (2018)

This web service allows the submission of a patient's insurance items.

UpdateEmailAddress (2004)

This service provides the caller with a way to set the primary e-mail address for a MyChart patient. This service is invoked if the external system is collecting the patient's e-mail address outside of MyChart. Whenever the external system is updated with a new e-mail address for a patient this service should be called.

UpdateEmailAddress (2009)

This is the WCF version of this service. This service can be used to set the primary e-mail address for a MyChart user (either for a patient or non-patient). This service is typically used when email addresses are collected outside of MyChart using a single sign on (SSO) configuration.

UpdateNonPatientDemographics

This web service can be called to update demographics for a non-patient account. Note that all of the demographics fields for the non-patient will be updated based on the provided inputs. Passing in a null value for a given field will result in clearing out that particular data element from the non-patient's record. We recommend using this web service after first collecting the demographics information using the GetNonPatientDemographics web service.

UpdatePatientDemographics (2013)

This service updates patient demographics in a way that's similar to how it's done in MyChart.

UpdateWebAccountDevicesStatus

This web service will change the device status for all secondary login devices associated with a MyChart account. An example of a secondary login device would be configuring iOS passcode or Touch ID in MyChart Mobile. Organizations using single sign on (SSO) can set the status of devices to 1-Password Change when a user changes their password.

Patient Access Mobile

AddFlowsheetReadings

This service adds new readings to a patient entered flowsheet, or edits or deletes existing ones.

AuthenticateWebAccount

This web service authenticates a MyChart user based on a username and password. This web service can be used for both patients and non-patient proxies.

CancelAppointment (2010)

This service allows an external system to directly cancel upcoming appointments for a patient.

ConfirmAppointment

This service allows an external system to confirm an upcoming appointment for a patient.

DeleteMessage

This web service can be called to mark MyChart messages as deleted, which removes them from a patient's Inbox view.

GetAllergies

This service allows an external system to retrieve the MyChart list of current allergies for a patient.

GetCancelAppointmentDetails

This service allows an external system to get information about canceling an upcoming appointment for a patient. This service should be invoked by an external system looking to provide the patient with the ability to determine the cancel information for canceling upcoming appointments outside of the MyChart application. Canceling information includes information about whether comments are allowed, whether a cancel reason is required, and whether there are linked appointments.

GetCurrentHealthIssues (2010)

This service allows an external system to retrieve the list of current health issues for a patient. The list of current health issues matches what is displayed in MyChart.

GetFlowsheetReadings

This service returns all of the patient's readings from within the requested timeframe for a given patient-entered flowsheet. There is a system limit on how many readings can be loaded in one request. If this limit is exceeded, a flag is returned indicating that there is more data to be loaded within the timeframe you requested. When this happens, the NextEndInstant property indicates what instant to use as the EndInstant for the next request to load the remaining data.

GetFlowsheets

This web service returns a list of all the patient-entered flowsheets assigned to the given patient.

GetFutureAppointments (2011)

This service allows an external system to retrieve the list of upcoming appointments for a patient along with useful information regarding each of the appointments. This service should be invoked by an external system looking to provide the patient with access to upcoming appointments outside the MyChart application.

GetHealthAdvisories (2010)

This service allows an external system to retrieve the list of health advisories for a patient.

GetHealthAdvisories (2013)

This service allows an external system to retrieve the list of health advisories for a patient.

GetHealthAdvisories (2017)

This web service returns the health advisories for a patient. Used in conjunction with the Health Maintenance functionality. This version adds past completion dates.

GetImmunizations

This service allows an external system to retrieve the list of immunizations for a patient.

GetMedicalAdviceRecipients (2010)

This web service returns the list of valid users, pools and possibly subjects that a given MyChart user can use to send messages for a given patient.

GetMedicalAdviceRecipients (2016)

This web service returns the list of valid users, pools and possibly subjects that a given MyChart user can use to send messages for a given patient. This service is an extension of the GetMedicalAdviceRecipients service. This service adds attachment restriction information from Patient Access System Definitions.

GetMedications

This service allows an external system to retrieve the list of current and recently expired outpatient medications for a patient.

GetMessageDetails (2010)

This service allows an external system to retrieve details for a particular MyChart Inbox message.

GetMessageDetails (2015)

This service allows an external system to retrieve details for a particular MyChart Inbox message. This service is similar to the 2009 GetMessageDetails web service, with the exception that the Questionnaire object has been added in the MessageTask response.

GetMessages

This service allows an external system to retrieve the list of MyChart Inbox messages for a patient.

GetPastAppointmentDetails (2011)

This service allows an external system to retrieve the details of a past appointment for a patient.

GetPastAppointmentDetails (2017)

This web service is used to get the past appointment details for a patient. It is a new auto-generated version of the GetPastAppointmentDetails service. The order IDs associated with the past appointment have been added, as well as contact ID types for the appointment.

GetPastAppointments (2011)

This service allows an external system to retrieve the list of past appointments for a patient. The service returns 25 test results at a time.

GetPastVisits

This web service retrieves the list of past visits visible in MyChart. It includes admissions, not just outpatient and surgical past visits.

GetPatientPhoto (2016)

This web service returns the photo saved to a patient's MyChart account or patient record in Hyperspace. This service is similar to the 2014 GetPatientPhotos web service, with the exception that it can resize the photos returned and includes more photo metadata.

GetPatientPhoto (2014)

This web service returns the photo saved to a patient's record in Hyperspace.

GetPatientVisitGuide

This web service can be called to return the status and data of a user's patient visit guide.

GetSchedulingInformation

This web service returns information about visit types available to a patient for direct scheduling. The visit types are limited to those that use workflow Mobile.

GetSchedulingProvidersInformation

Returns a list of possible providers given the specified reason for a visit.

GetSentMessageDetail (2016)

This service allows patients to view a message they previously sent to a Hyperspace user from within your custom application or patient portal. Additionally, you can use new properties to restrict and resize message attachments in order to improve performance and ensure that data successfully passes through your web infrastructure. Aside from this additional functionality, this web service is similar to the GetSentMessageDetails web service.

GetSentMessageDetails (2013)

This web service returns details for a specific message a patient sent.PatientID is where the data source is. This is the subject in a proxy scenario.MyChartAccountID is the viewer. This is the delegate in a proxy scenario, and is the MyChart account of the patient if the patient themselves is viewing the information. Audit trial logging in the MyChart record is based on these IDs for what account is viewing and what account is being viewed. This service can use MTOM or a base64 string for the attachment payload.

GetSentMessages

This web service returns the list of messages for a MyChart user's Outbox. PatientID is where the data source is. This is the subject in a proxy scenario. MyChartAccountID is the viewer. This is the delegate in a proxy scenario, and is the MyChart account of the patient if the patient themselves is viewing the information. Audit trail logging in the MyChart record is based on these IDs for what account is viewing and what account is being viewed.

GetSharedClinicalNoteDetails

This web service returns note content for a single note.

GetSharedClinicalNotes

This web service returns a list of notes visible in MyChart for a given patient ID and MyChart account ID. The corresponding past visit information associated with the notes is returned as well.

GetSlotReviewInformation

Given a specific slot, returns more detailed information about the slot for the specified patient.

GetSlotsInformation

This web service returns a list of possible slots.

GetTestResultDetails (2010)

This service allows an external system to retrieve details of a test results for a patient.

GetTestResultDetails (2011)

This service allows an external system to retrieve details of a test results for a patient including imaging addenda and scans.

GetTestResults (2010)

This service allows an external system to retrieve the list of test results for a patient.

GetVisitTypeInformation

This web service returns scheduling information about a given Reason for Visit index. The appropriate Reason for Visit index is acquired by first calling the GetSchedulingInformation web service.

LogAudit

This service allows an external system to log audit information for a MyChart account. Note that the other PatientAccessMobile web services already update the MyChart audit trail, so this web service only needs to be called if you want to log additional actions.

PostAppointment

This web service attempts to schedule an appointment from the given slot information.

RemoveMyChartPatientPhoto

You can use this web service to allow patients to remove their patient photo from your custom mobile application or patient portal. Additionally, patients can use it to remove photos for patients to whom they have proxy access.

SendAppointmentCancellationRequest

This web service sends a message to the organization requesting that an appointment or appointments be cancelled.

SendMessage (2010)

This web service can be called to send a message from a patient. It can be used to initiate a new message chain or for message replies.PatientID is where the data source is. This is the subject in a proxy scenario. MyChartAccountID is the viewer. This is the delegate in a proxy scenario, and is the MyChart account of the patient if the patient herself is viewing the information. Logging in the MyChart record is based on these IDs for what account is viewing and what account is being viewed. This is the stored in the PatientID's MyChart record in a proxy scenario. The attachment requirements must be validated by the caller of the service.

SendMessage (2013)

This web service supports sending a message with attachment from a patient. It can be used to initiate a new message chain or for message replies.This service can use MTOM or a base64 string for the attachment payload. Interconnect must be configured to use the MTOM binding in the Security Policy section to use MTOM. PatientID is where the data source is. This is the subject in a proxy scenario. MyChartAccountID is the viewer. This is the delegate in a proxy scenario, and is the MyChart account of the patient if the patient herself is viewing the information. Logging in the MyChart record is based on these IDs for what account is viewing and what account is being viewed. This is stored in the PatientID's MyChart account in a proxy scenario.

SetMyChartPatientPhoto

You can use this web service to allow patients to choose and upload their patient photo for your custom mobile application or patient portal. Additionally, patients (and non-patient proxies) can use it to set photos for those patients to whom they have proxy access. Depending on your configuration, the photo can also be immediately saved to the patient's chart and visible in Hyperspace. Alternatively, you can require a Hyperspace user to go to the Demographics activity or Appointment Desk to review and approve the photo before it is saved to the patient's chart and visible to clinicians.

SetPatientPhotoOperation

You can use this web service to allow patients to choose and upload their patient photo for your custom mobile application or patient portal. Additionally, patients (and non-patient proxies) can use it to set photos for those patients to whom they have proxy access. Depending on your configuration, the photo can also be immediately saved to the patient's chart and visible in Hyperspace. Alternatively, you can require a Hyperspace user to go to the Demographics activity or Appointment Desk to review and approve the photo before it is saved to the patient's chart and visible to clinicians.

Pharmacy

CancelFills

This web service allows for communication between a third-party Point of Sale (POS) pharmacy system and Willow Ambulatory. With this service, pharmacists and technicians can easily perform a fill cancellation or return workflow by taking action in the Point of Sale system. This web service requests that the specified fills be canceled in the pharmacy system. The service handles updating inventory levels (If using Willow Inventory) and reversing any charges that have already been processed for the fill.

DispenseFills (2012)

This web service allows for communication between a third-party Point of Sale (POS) pharmacy system and Willow Ambulatory. With this service, a POS system can display prescription information from Willow Ambulatory and then pharmacists and technicians can mark prescriptions as dispensed in Willow Ambulatory by taking action in the Point of Sale system.

DispenseFills (2015)

This web service requests that the specified fills be marked as dispensed in Willow Ambulatory.

GetCreditCards

This web service gets the credit cards for a given patient that are available for use at a given pharmacy. This web service can also provide an IVR (Interactive voice response) system the ability to query what credit cards are available on a patients record that can be charged for a fill. When requesting a refill, a patient can then specify which credit card from their record to use for the payment for the fill.

GetPrescriptionInfo (2012)

Returns prescription information, including information about the patient who owns the prescriptions. Either a prescription number or the patient MRN can be used to identify the patient. You cannot specify both. The pharmacy NCPDP ID should be provided. It will be used to determine the appropriate MRN for the patient. When searching by prescription number, it eliminates the possibility of finding duplicate active orders that share the same prescription number (from different pharmacies). If the pharmacy NCPDP ID is not known, a prescription can be found using the prescription number alone if it is unique across all pharmacies. If more than one active prescription is found, an error is returned. If no active prescriptions are found, the most recently discontinued prescription will be returned. If no prescription can be found, an error is returned.

GetPrescriptionInfo (2015)

This web service returns prescription information, including information about the patient who owns the prescriptions, given a prescription number. This web services provides a POS (Point of Sale) system a method to query the system about prescription information. Using the data received through this service, the system has sufficient information in order to use the CancelFills, DispenseFills and RequestFills web services. The data returned also includes billing information, patient demographics, pharmacy information, clinical prescription information and provider information.

GetPrescriptionInfoById (2012)

This web service returns prescription information, including information about the patient who owns the prescriptions. PrescriptionId is required. The pharmacy NCPDP ID should be provided. It will be used to determine the appropriate MRN for the patient.If no prescription can be found, an error is returned. The fillId parameter is optional and can be used to filter out all fills except the one of interest.

GetPrescriptionInfoById (2015)

This web service returns prescription information, including information about the patient who owns the prescriptions, given an Epic order ID. This web services provides a POS (Point of Sale) system a method to query the system about prescription information. Using the data received through this service, the system has sufficient information in order to use the CancelFills, DispenseFills and RequestFills web services. The data returned also includes billing information, patient demographics, pharmacy information, clinical prescription information and provider information.

GetVersion (2012)

This web service helps third-party vendors determine which version of the following web services are installed at a particular organization:

- DispenseFills
- GetPrescriptionInfo
- RequestFills

A vendor can check a web service's version in the vendor's code and use that information to conditionally support an organization regardless of the particular combination of Interconnect updates that organization has installed.

GetVersion (2015)

This web service helps third-party vendors determine which version of the following web services are installed at a particular organization (based on WebServicesApiVersion):

- CancelFills
- DispenseFills
- GetCreditCards
- GetPrescriptionInfo
- GetPrescriptionInfoById
- RequestFills

A vendor can check a web service's version in the vendor's code and use that information to conditionally support an organization regardless of the particular combination of Interconnect updates that organization has installed. The WebServicesBuildNumber is useful for debugging to determine whether the web service build contains certain updates.

RequestFills (2012)

This web service is intended to be used with an IVR system. A patient can call into the IVR system and initiate refill authorization requests if a prescription is out of refills. This service allows the refill requests to be sent to Epic and queued up for pharmacists and technicians in Willow Ambulatory so they can fill them more quickly.

RequestFills (2015)

Requests that the pharmacy system initiates a fill for the specified prescriptions.This web service is intended to be used with an IVR system. A patient can call into the IVR system and initiate a refill of their prescription. The system will create a refill authorization request if a prescription is out of refills. This service allows the refill requests to be sent to Epic and queued up for pharmacists and technicians in Willow Ambulatory to begin filling.

Referrals

GetPatientReferrals

This web service returns a list of referrals for a given patient. Options for filtering include referral status, service area, providers associated with the referral, and date range.

UpdateReferral

This web service updates an existing referral using passed-in values.

Reports

GetEncounterReport (2008)

This web service retrieves print group-based reports in HTML format.

GetPatientReport (2008)

This web service retrieves print group-based reports in HTML format.

Scheduling

AddOnShiftProviderSchedule

This web service lets your third-party scheduling or staffing system send information directly to Epic for use with treatment team assignments. Managers and charge nurses responsible for making clinician-to-patient assignments can use this information to perform their assignment workflows without having to reference scheduling information from outside of the system. This web service updates assignment records with shift provider schedule information, which includes shift start date and time, shift end date and time, the department in which the provider is scheduled, and role.

AssignReferralToAppointment

This web service can assign a referral to an appointment or un-assign a referral from an appointment. Both the referral and appointment must already be in existence.

CancelAppointment (2011)

This web service marks an appointment as canceled based on information given to determine the appointment.

EditAppointmentNotes

Given information to determine an appointment, the service files updates to the appointment notes for a single appointment. This overwrites any previous appointment notes.

EditProviderSlot

This web service can be used to edit pre-existing provider slots. It can't create any new slots.

GetAutoSchedulerSolutions

Given search information such as the patient, visit type, and providers, this service returns available solutions that can be scheduled as appointments.

GetAutoSchedulerSolutionsAdvanced

Given search information such as the patient, visit type, and providers, this service returns available solutions that can be scheduled as appointments.

GetAutoSchedulerSolutionsAdvancedMultiple

Given search information such as the patient, visit type, and providers, this service returns available solutions that can be scheduled as appointments. This version of the web service finds open times that will take multiple visits.

GetDepartmentWaitTimes

This web service returns average wait times for one or more departments. This time is calculated based on cycle time for an appointment. That is, how long it has historically taken patients to be seen.

GetFutureAppointments (2015)

This web service is an extension of the patient access GetFutureAppointments web service. It creates a new auto-generated version to include the questionnaire ID, which allows the consumer of the service to link to MyChart questionnaire pages directly once the responsive design framework is complete.

GetFutureAppointments (2016)

This web service is an extension of the patient access GetFutureAppointments web service. It adds to the existing auto-generated version response elements to include the report grouper items. This allows the consumer of the service to categorize visit types into different groups, such as a group that defines visit types for custom video visits. This service also includes the arrival time for the appointment.

GetOpenSlots (2010)

Given search information such as the patient, visit type, and providers, this web service returns available slots that can be booked as appointments.

GetPastAppointments (2015)

This service returns a list of the patient's past appointments. The user may specify the number of appointments returned and multiple calls may be necessary to get all appointments.

GetPatientAppointments

This web service retrieves the appointments for a patient.

GetPatientNotificationPreferences

This web service returns a specific patient's notification preferences, including email and notification options.

GetPatientSchedulableOrders

This web service returns orders that are schedulable for a given patient. It returns orders similar to the Orders tab on the Appointment Desk.

GetPatientSchedulingPreferences

This web service returns a specific patient's scheduling preferences, including location, days of the week, provider sex, provider language, and time of day.

GetPatientWaitlist

For a given patient, status, date range, and user, this web service returns the wait list entries that match and are allowed to be viewed by that user.

GetProviderAppointments

This web service retrieves the appointments for a provider or a list of providers. Although the request elements Providers, Departments, Subgroups and Specialty are optional, at least one must be specified to get any results.

GetProviderAvailability

This web service gets the schedule availability for a provider for a range of dates.

GetProviderSchedule

This web service gets the schedule information for a provider on a given date.

GetProviderWaitTimes

This web service returns average wait times for one or more providers. This time is calculated based on cycle time for an appointment. That is, how long it has historically taken patients to be seen. You might use this web service to show provider wait times on large screens in your waiting rooms or in MyChart for patients who are scheduling their own appointments.

GetScheduleDaysForProviders

This web service performs the same functions as GetScheduleDaysForProvider, but adds the following features:

- Allows filtering of results by a list of departments
- Allows filtering of results by a list of visit types
- Returns the patient-friendly start time for each slot
- Returns the arrival time for each slot

GetScheduleInstructions

Given scheduling information such as visit type, patient, provider, and department, this service returns the scheduling instructions.

HoldReleaseTimeSlots

This web service allows selection of multiple time slots on provider schedules to set holds or release previous holds.

ScheduleAppointment (2010)

This service enables external systems to schedule appointments. You can also pass in blocks and link the scheduled appointment to a given Wait List contact. This service can be invoked by the external system after the user is presented with a list of available time slots returned by the GetOpenSlots web service. If you need to enable an external system to allow patients to schedule appointments, use the MyChart ScheduleAppointment web service.

ScheduleAppointment (2012)

This web service is used to schedule appointments that are designated for open scheduling. It is intended to allow you to interface with third-party open scheduling providers. This web service checks that the given provider is enabled for open scheduling, the department is configured for open scheduling, and the visit type is enabled for open scheduling in the given department.

ScheduleMultipleAppointments

This web service schedules multiple appointments and links them sequentially.

SetInterpreterFlag

This web service allows a user to set the interpreter flag on an appointment to Not Needed or Needs Review. This action is similar to what a user can do from the Interpreter Scheduling report in Hyperspace.

SetPatientNotificationPreferences

This web service sets a specific patient's notification preferences, including email and notification options.

SetPatientSchedulingPreferences

This web service will be used to set a specific patient's scheduling preferences, including location, days of the week, provider sex, provider language, and time of day.

UpdateWaitListEntry

This web service creates a new wait list entry for a patient or updates an existing wait list entry for a patient.

Security

AcceptBreakTheGlass

This service logs an accepted Break-the-Glass form to run through the action lists set up in Epic.

ActivateUser

This web service activates a user record by setting the Status item. Because this service modifies user access to Epic, if you wish to enable this service, authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy. In addition to activating the user, this service also unblocks a blocked user, clears an end date set in the past, updates a record based on linked templates, and adds a comment to the login history if necessary to prevent premature automatic inactivation.

CancelBreakTheGlass

This service handles logging a cancelled Break-the-Glass prompt.

CheckBreakTheGlass

This service runs the released checks in Break-the-Glass to determine the type of access the user can have. The user is denied access to the information if an inappropriate check is passed. The user is granted access to the information if an appropriate check is passed. The user needs to break the glass if neither an appropriate nor an inappropriate check is passed.

CreateUser (2012)

This web service creates a user record and returns the ID of the new record. It can simultaneously set items in the newly created record. Because this service modifies user access to Epic, if you want to enable this service, authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy. In order for the newly created user account to be functional, you will need at the minimum, a user role and a way for the user to log in. You can set the user's password with another service, create the user with an authentication configuration set in the user record or the template, or have a default authentication configuration set for your organization.

CreateUser (2014)

This service creates a new user record for a normal user and populates the initial items. This service expands on the original CreateUser and allows customers to set new items like multiple linkable templates, employee demographics, and category report groupers during user creation.

CreateUser2

This service creates a new user record for a normal user and populates the initial items. This service expands on the original CreateUser and allows customers to set new items like multiple linkable templates, employee demographics, and category report groupers during user creation.

DeleteUser

This web service soft deletes a user record. Because this service modifies user access to Epic, if you want to enable this service, authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy. In an IntraConnect community, this service can only be used on the deployment that owns the user record.

ForcePasswordChange

This web service sets a flag that forces a user to select a new password on next login. It should be called right after setting a user's password if the password change was done by an administrator. Because this service modifies user access to Epic, if you want to enable this service, authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy. This service can only be used for users who use Epic native authentication. Setting this flag will allow a user to change his password even if it the current password is younger than the minimum password age.

GetUserPagerID

This web service retrieves the In Basket pager ID for a user.

InactivateUser

This web service inactivates a user record by setting the Status item. Because this service modifies user access to Epic, if you want to enable this service, authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy.

InitializeBreakTheGlass

This service returns Break-the-Glass initialization information required for client development to implement Break-the-Glass outside of Epic. The information includes the data requirements for the reason and explanation fields, the legal message, a list of possible reasons, the message to display for inappropriate access, the default Hyperspace timeout in minutes, and any reason-specific overrides for the explanation field's data requirement

Introspect

This web service implements the OAuth2 token introspection endpoint defined by RFC 7662. It allows an application using OAuth2 secured services to get data associated with an OAuth2 token. One particularly useful function of this service is to allow the client application to determine the user associated with the OAuth2 token. You can also use an API manager to validate a token when choosing to allow a request through.This service should always be consumed using JSON in accordance with RFC 7662.

SetDutchName

This service allows you to update a user's name according to the default rules for the Dutch locale.

SetReportSelectionCriteria

Updates the Report Selection Criteria items for an existing user record.

SetUserExternalPasswords

This web service sets passwords associated with a user's external IDs. Because this service modifies user access to Epic and can cause user passwords to be transmitted, if you want to enable this service,

authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy. A password cannot be set for an external ID type until an ID has first been set for that type.

SetUserPagerID

This web service to provision pagers by setting the In Basket pager ID for a user without having to log into Hyperspace.

SetUserPassword

This web service sets the user's Epic password to a new value. Because this service modifies user access to Epic and can cause user passwords to be transmitted, if you wish to enable this service, authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy. It updates the user's password history as if it had been changed through Chronicles. It tracks time and user, but not IP or client ID, which might not be available. It will not allow setting a password to a value that violates the environment's password complexity requirements, but bypasses the history requirements as if it were changed by an administrator. It can only be used to change a password for users using Epic native authentication.

UpdateAuthorizedServiceAreas

This web service updates the list of service areas the user can access.

UpdateBIDefaultUser

This web service allows write access to the BI default user name item in the User records. This web service updates the value stored in the BusinessObjects User Name item for the specified user. You can use this web service with a third-party identity management system to automate users' BusinessObjects access based on job role.

UpdateCommunityUser

This web service allows web service write access to the EpicCare Link/PlanLink/Healthy Planet Link ("community user") items in user records.

UpdateFacilityDepartmentList

This web service updates the list of departments that the user has access to.

UpdateLoginDepartments

This web service updates the items in a user record that determine the login departments available to a user.

UpdateUser (2012)

This web service updates multiple items in the user record for a specified user. It cannot be used to set items that are controlled by a template. Because this service modifies user access to Epic, if you want to enable this service, authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy. To modify an item, that item must be listed in the items array. For most items, the old value will be cleared and replaced with the new value, but for some multiple response items, you can choose to append new values to the end of the list. To clear an item, do not include the element corresponding to the item in the request, but list the item by name in the Items list.To leave an item unchanged, do not include the item in the items list.

UpdateUser (2014)

This web service updates multiple items in the user record for a specified user. It cannot be used to set items that are controlled by a template. This service expands on the original UpdateUser and allows customers to modify new items like multiple linkable templates, employee demographics, and category report groupers for existing users.

UpdateUser2

This web service updates multiple items in the user record for a specified user. It cannot be used to set items that are controlled by a template. This service expands on the original UpdateUser and allows customers to modify new items like multiple linkable templates, employee demographics, and category report groupers for existing users.

UpdateUserDemographics

This web service receives a user ID along with demographic information and updates the user record. This service can't be used to update the linked provider record.

UpdateUserGroups

This service updates the User Group/User Category item in a user record.

ViewAuthorizedServiceAreas

This web services retrieves the list of service areas that a user can access.

ViewBIDefaultUser

This web service has read access to the BI default user name item in the user records. This web service returns the value stored in the BusinessObjects User Name item for the specified user. You can use this web service with a third-party identity management system to automate users' BusinessObjects access based on job role.

ViewCommunityUser

This web service allows web service read access to the EpicCare Link/PlanLink/Healthy Planet Link ("community user") items in user records.

ViewCurrentReportSelectionCriteria

Get information about the Report Selection Criteria items for an existing user record.

ViewFacilityDepartmentList

This service retrieves the list of available departments for a user.

ViewLoginDepartments

This web service retrieves the login department settings for a user record.

ViewUser (2012)

This web service returns the requested items from a User record in Epic. Because this service transmits Epic user access properties, if you want to enable this service, authentication and encryption policies for this service on your Interconnect server should be set up in accordance with your organization's security policy.

ViewUser (2014)

For a specified user record, this web service return the values of the fields that can be set via CreateUser or UpdateUser. ViewUser can be used before (or in lieu of) UpdateUser to verify the values currently set on the user so you know whether anything needs to be modified, and it can be called after using one of the other services to modify a user record to confirm that items have been set correctly. This web service only works for foreground users, since the items retrieved are primarily of interest to those users.

ViewUser2

For a specified user record, this web service return the values of the fields that can be set via CreateUser or UpdateUser. ViewUser can be used before (or in lieu of) UpdateUser to verify the values currently set on the user so you know whether anything needs to be modified, and it can be called after using one of the other services to modify a user record to confirm that items have been set correctly. This web service only works for foreground users, since the items retrieved are primarily of interest to those users.

ViewUserGroups

This web service retrieves the User Group/User Category item for a user record.

Specialty

GetPatientResultsByProcedure

This web service returns result information for a particular procedure. It is similar to GetPatientResultComponents, but is designed for searches by procedure. It returns results grouped by order. It does not return information for imaging orders.

GetSurgicalRecord (2011)

This service returns data elements from the surgical case/log records for the record whose ID is provided in the service request. If both case and log records exist, it returns data from both of the records. Otherwise, it returns data for the existing record.

GetSurgicalRecord (2014)

This service returns data elements from the surgical case/log records for the record whose ID is provided in the service request. If both case and log records exist, it returns data from both of the records. Otherwise, it returns data for the existing record.

GetSurgicalRecord (2015)

This service returns data elements from the surgical case/log records for the record whose ID is provided in the service request. If both case and log records exist, it returns data from both of the records. Otherwise, it returns data for the existing record.

GetSurgicalRecords (2011)

This service returns data for all of the surgical case and log records selected based upon the filtering criteria provided in the service request. If both case and log records exist, it returns data from both of the records. Otherwise, it returns data for the existing record.

GetSurgicalRecords (2014)

This service returns data for all of the surgical case and log records selected based upon the filtering criteria provided in the service request. If both case and log records exist, it returns data from both of the records. Otherwise, it returns data for the existing record.

GetSurgicalRecords (2015)

This service returns data for all of the surgical case and log records selected based upon the filtering criteria provided in the service request. If both case and log records exist, it returns data from both of the records. Otherwise, it returns data for the existing record.

GetWaitTimes

Given a department ID and ID type, this service returns historical wait times for each event in that department. The web service uses the wait time trends settings defined in your department record to calculate wait times.

Telehealth

GetCrossOrgReasonForVisit

This web service is used for cross-organizational video visits. It gets the reason for visit category IDs from different organizations.

SendCrossOrgVisitEvent

This web service is for organizations using cross-organizational video visits. When a patient's encounter is marked completed or cancelled at an outside organization, this web service marks the patient's encounter completed or cancelled at the patient's home organization. It also allows the outside organization to send video visit notifications to the patient's MyChart account if the patient's account is set up to receive such notifications.

SetExternalConnectionStatus

This web service allows Hyperspace to properly reflect the video visit status of a third party video system in the provider schedule and connect visit navigator sections. When the user clicks on the FDI link which passes information to the third party video system, the video vendor can call back into this web service to tell other users in Hyperspace that that user is waiting in the video call.

Utility

AddDevice

This web service is for Haiku/Rover to add an authorized handheld device. The device is deactivated by default. Call the SetStatus web service to activate it.

AddManufacturer

This web service adds a new printer manufacturer to the Manufacturer category list. This web service can't be used to edit existing category values.

AddModel

This web service adds a new printer model to the Model category list. This web service can't be used to edit existing category values.

AddPrintDriverName

This web service adds a new printer driver to the Driver Namecategory list. This web service can't be used to edit existing categories.

AddPrinter (2015)

This web service creates a printer device with specified configurations in the Epic database.

AddPrinter (2017)

Creates a new printer device record. This web service is similar to the Epic 2015 AddPrinter web service, but it includes additional printer tracking items.

AddWorkstation

This web service creates a new workstation record.

AddWorkstationFunctionalType

This web service adds a new workstation type to the Functional Type category list. This web service can't be used to edit existing categories.

CheckPrinterRedirection

This web service validates and resolves the printer redirection chain. This web service can be used for either looking up an existing printer redirection chain, or validating a redirection chain after the user attempts to make a change.

DeleteDevice

This web service is used by Haiku to delete a previously authorized device.

DeletePrinter

This web service deletes a printer device in the Epic database. This web service will always perform soft deletion on device records.

DeleteWorkstation

This web service deletes a workstation record.

EdifactMessage

This web service enqueues an EDIFACT or XML message to Bridges.

EditPrinter (2015)

This web service edits the configuration of a printer device. A later version of this web service, Core.2018.Services.Utility.AddPrinter, is available and includes the ability to set additional tracking items in printer device records.

EditPrinter (2017)

This web service modifies an existing printer devicerecord. This web service is similar to theEpic 2015 EditPrinter web service but includes additional printer tracking items.

EditWorkstation

This web service modifies items in a workstation record.

GetDeviceTypeList

This web service gets a list of all the available device types.

GetInternalIdentifier

This service takes in ID, ID type, and master file as input and returns the internal ID for the given ID.

GetPatientChartUpToDate

The web service queries whether the patient's chart is up to date. If the chart is not up to date and synchronization has not started, the web service starts the process of synchronizing the patient chart and returns a time estimate in seconds of how long it expects the synchronization will take. If the chart is not up-to-date but synchronization has started, the service returns the status and time estimate but doesn't restart synchronization.

GetPrinterDetails (2015)

This web service gets printer device detail information from the database.

GetPrinterDetails (2017)

This web service returns information about a printer device record. This web service is similar to the Epic 2015 GetPrinterDetails web service but includes details for additional printer tracking items.

GetPrinterList (2015)

This web service enumerate printers in the database. You can also use it for searching.

GetPrinterList (2017)

This web service returns a list of printer device records in an environment. You can search for printers by ID, name, printer path, alias, or model. This web service is similar to the Epic 2015 GetPrinterList web service but includes the ability to search for printers by model, which is not available with GetPrinterList.

GetProtectedPrinterProperties

This web service returns a list of protected items in a printer device record. Protected items in an environment can be edited only by Data Courier.

GetProtectedWorkstationProperties

This web service returns a list of protected items in a printer device record. Protected items in an environment can be edited only by Data Courier.

GetWorkstationDetails

This web service returns information about a workstation record.

GetWorkstations

This web service returns a list of workstation records in an environment. You can search by workstation ID, name, identifier, or type to return workstations.

PrintTestPage

This web service prints test pages from a printer device. Supports both rich text and plain text.

ReceiveCommunication

This web service will take patient information, such as MRN, birthdate, or phone number, as well as a context. When a user receives a phone call, the phone system alerts the operational database with the information it has, so that a contact can be logged and the appropriate activity launched. If a contact type is specified, a new communication tracking (CAL) record is created to document the phone call itself, which is attached to the record of the launched activity. If call information is not provided, this web service can still launch any patient related activity. There will be no response, only error codes. On success, there is nothing that needs to be returned.

RestorePrinter

This web service restores a soft-deleted printer device.

RestoreWorkstation

This web service restores a soft-deleted workstation record.

SendMessage (2014)

This web service allows sending a message to a recipient's In Basket. The web service can accept message text, a priority, recipients, and a patient ID/DAT.

SetLoggedErrorDeleted

This web service soft deletes an error log record.

SetLoggedErrorUndeleted

This web service undelete (restores) an error log record.

SetStatus

This web service is used for Haiku/Rover to activate/deactivate an authorized handheld device.

UpdatePrintJobStatus

This web service updates the status of a print job in Epic.

Kit Data

Accounts

The hospital account is the central hub of the whole billing process, because it's where all the charges for the visit accumulate. The coverages on the hospital account are asked to pay for the charges first (in filing order, if there is more than one), and the guarantor is responsible for whatever is left over. Hospital accounts are extremely data-dense records that are the hub of most hospital billing workflows and reporting. A hospital account is opened as soon as (or before) a patient enters the facility, and it stays open until every charge on the account has been paid, written off, or otherwise accounted for. A hospital account captures much of the information from registration, including the patient's demographics. The account is linked to the applicable guarantor and coverages, and it's assigned an account class, such as Inpatient or Emergency. At this point, the status of the hospital account is Open, and it stays that way until the patient is discharged.

During the patient's stay, the hospital account accrues multiple charges, for items like the patient's bed, procedures performed, and medications administered. When the patient is admitted and the hospital account's status is Open, these charges accumulate but aren't sent anywhere because the hospital needs time to verify them. Meanwhile, data like the total amount billed and the amount currently owed begins to be calculated.

When the patient is discharged, the hospital account's status is set to DNB (Discharged Not Billed). This status gives the hospital a few days to review the charges on the account and complete the coding process. The codes determine how payors reimburse for the charges on the account.After a specified number of days and all potential errors on the hospital account have been addressed, the account status is changed to Billed. Claims are sent to each payor, payments and denials are received, adjustments are made to charge and coding data to fix mistakes and comply with insurance requirements, and balances are shifted between payors.

When the balance on the account is zero, the status is changed to Closed. The life of a professional billing account is similar, but it occurs in an outpatient setting instead of a hospital.

Data Mapping

Different organizations use different values to describe the same concept. For example, a patient's sex might be recorded as male or female, but other values such as man, woman, boy, girl, XX, and XY could also be used to record a patient's sex. If organizations using different values want to share data or collaborate, they need a way to map their different values to a single standard.

To make this sharing and collaboration easier, Epic community members can map values to a reference terminology standard. There are many different reference terminology standards, including SNOMED CT, HL7, and ICD-10-PCS. When this mapping is completed, you can create reports that refer to the same concepts at any organization. Any organization that has mapped their values can run these queries. If your Kit app relies on a particular data mapping, work with all organizations who use the app to complete that mapping. Epic community members typically complete mapping only when they have a particular use case for it. If an organization hasn't previously needed to use the mapping required by your app, you confirm the mapping exists when the organization implements your app. Epic organizations have access to documentation on the Epic UserWeb that describes how to complete these mappings.

The tables described below provide the infrastructure for storing these mappings in Caboodle. You can use these tables to refer to mapped values in your app:

MappingDim contains mappings between Caboodle data and standard terminologies. Organizations can map an entire row or values from particular columns. Each row in MappingDim represents a mapping between an organization-specific record or value and a standard value. Use the SourceValueId column to join to the parent DMC (the DMC that contains the values you want to map). If the MappingDim row maps a row to the standard, join on that row's surrogate or durable key. If the MappingDim row maps a value in a column to the standard, join on the string value in that column. Refer to the section below for more details.

MappingTableColumnDim includes the names of the Caboodle tables and columns associated with the mapping. Use MappingTableColumnBridge to join MappingDim to MappingTableColumnDim.

StandardDim contains a list of the reference terminology standards used in MappingDim. Join MappingDim to StandardDim on StandardId to use the name of a standard.

Note that mappings specific to particular subject areas are contained additional tables. For example, diagnosis SNOMED mappings are stored in DiagnosisTerminologyDim. In Kit documentation, these tables are described along with the other DMCs relevant to the subject area. Joins and Filters for Standard Mappings. If you create apps or extracts that use standard mappings, the required joins and filters can be a little tricky.

Keep the following tips in mind when working with standard mappings:

- For record or category value mappings, join MappingDim.SourceValueId to the table and column specified in the TableName and ColumnName columns in MappingTableColumnDim. Add a filter on MappingTableColumnDim.TableName and MappingTableColumnDim.ColumnName.
- For flowsheet mappings, join MappingDim.SourceValueId to the flowsheet row ID specified in FlowsheetRowDim. Join MappingDim.SourceValue to FlowsheetValueFact.Value. Add a filter where MappingTableColumnDim.TableName = 'flowsheetvaluefact'.

Dates and Times

Most Caboodle DMCs don't store dates directly. Instead, date columns link to DateDim, which includes the date value and the date formatted according to each community member's settings. DateDim includes additional information about each date, such as the day of the week, the date's instant at midnight, and whether the date occurred on a weekend. DateDim includes every date from 1/1/1979 to 12/31/2099. TimeOfDayDim is similar to DateDim. Time columns in other DMCs link to TimeOfDayDim, which includes the time value, the time in both 12 and 24 hour formats, the number of the hour from 0 to 23, and the number of the minute from 0 to 59. TimeOfDayDim has one row for each minute of the day.

Diagnoses

Reports about when a diagnosis was attributed to a patient use DiagnosisEventFact. This DMC includes multiple types of diagnosis attribution, such as encounter diagnoses, problem lists, medical histories, professional charge transaction diagnoses, final coded diagnoses, external injury codes, and Health Maintenance modifiers that your organization maps to diagnoses. It also includes the patient, department, and providers associated with the diagnosis.

To include the name of the diagnosis in reports, join to DiagnosisDim. DiagnosisDim also indicates whether the diagnosis is in a grouper. Many DMCs link to DiagnosisDim through DiagnosisBridge, allowing you to report on combinations of diagnoses instead of just a single diagnosis.To include a standard code associated with a diagnosis (like an ICD-10 or SNOMED code), join to DiagnosisTerminologyDim.

Emergency Department Visits

Emergency departments are fast-moving environments in which actions, statuses, and other events affect the data flow. Distinct events are logged for nearly every milestone during the stay, including assigning providers to the treatment team, ordering exams, recording when certain documentation was done, changing the patient status, and discharging the patient or taking other ADT actions.

EdVisitFact contains the information you need to report on emergency department encounters, including the patient and providers associated with the encounter. There are many TimeOfDay columns for reporting on how quickly certain events happen after a patient arrives at the ED. You can use the HospitalAdmissionKey column to report on hospital admissions associated with ED visits.

To report on the primary reasons for patients arriving at the ED, join to ChiefComplaintDim. To report on all the chief complaints for ED visits, join to ChiefComplaintBridge.

Emergency departments are often associated with care areas. Care areas are subsets of departments, such as waiting rooms, trauma areas, nurseries, and groups of rooms serviced by a particular medicine cabinet. CareAreaDim includes emergency department care areas. However, if you are also including information from DepartmentDim in a report, we recommend using DepartmentDim.CareAreaName to include care area information to reduce the number of joins in your report.

Employees

EmployeeDim contains information about anyone who has an Epic user record, including providers, registration staff, and housekeeping staff like bed cleaners. Use this DMC to include in reports employee information like name, home address, and contact information. Some Epic community members also load HR data into this table, such as start and end dates, job title, and HR department.

Encounters

EncounterFact contains information about all types of patient encounters, including outpatient visits, hospital admissions, and emergency department visits. It includes encounters documented in an EMR. You can use EncounterFact to provide additional details about encounters for many different reporting topics.One topic for which encounter information is particularly useful is patient throughput. Patient throughput reports cover a variety of areas, from patients arriving to patients leaving and everything in between. Throughput is affected by admissions, bed planning, census, environmental services, and transport. Information on these topics is stored in several DMCs.

The main DMC you'll use for patient throughput reports is PatientLocationEventFact, which stores the physical location of patients at any point in time. Information about location updates and transfers is useful in reports about, for example, organizational efficiency, the risk of spreading infectious disease, and staffing needs based on the census of each department.

In PatientLocationEventFact, you can report on the event type associated with the patient's arrival in a particular location, and join to EncounterFact for information about the associated encounter.

Facility Structure

DepartmentDim stores information about all levels of a community member's facility structure. Beds, rooms, departments, locations, service areas, and other levels are all included in this dimension. DepartmentDim contains descriptive information like the name and address associated with each piece of the facility structure.

Each row contains information for all the levels above it in the facility structure. For example, a row for a department also contains data about the location and service area associated with the department, but columns related to rooms or beds in the department are blank.DepartmentDim also contains organization structure information that isn't connected to the physical layout of an organization, such as lab submitter information and business segment information. Claims, referrals, and coverages can all be associated with business segments. For example, business segments are frequently used with Tapestry if an organization has multiple payers or multiple providers, each one with confidential data. If an organization manages two or more separate health plans, business segments can segregate the records associated with each plan. Because claims, referrals, and coverages can each be associated with multiple business segments, DepartmentBridge maps many-to-one relationships for departments.

Hospital Admissions

HospitalAdmissionFact contains most of the information you need to report on inpatient hospital admissions, such as the providers, diagnoses, and duration associated with the admission. Depending on the non-Epic data you load, you can also report on the cost associated with the admission. If your report drills down into the attending providers associated with an admission (or emergency department visit), you can join to AttendingProviderFact for details like whether a provider was the first, last, or longest attending provider associated with the encounter.

You can create similar reports that use a patient's hospital inpatient or emergency department treatment team instead of their attending provider. For these reports, use CareTeamFact, which contains the patients and providers associated with the care team for a particular encounter. This DMC is especially useful for reporting on all providers associated with a given encounter and the encounters with which a provider is associated.

Imaging Studies

Report on imaging tests conducted by radiologists with ImagingFact. This DMC contains information about the following:

- The patient, encounter, and providers associated with an imaging study
- The departments, procedures, and resources used
- Whether the study was marked as interesting or abnormal
- When the study was performed, dictated, and transcribed
- How many times the study was repeated

The devices used for imaging studies are considered schedulable resources. Information about these devices is contained in ResourceDim, which includes all schedulable resources like devices and operating rooms.

Lab Results

With DMCs related to labs, you can report on both patients' lab results and how efficiently your lab is performing. Reports about patient lab results use LabComponentResultFact, which includes the patient, provider, and encounter associated with a component on a lab test, as well as when the component was resulted and what the result was.

Labor and Delivery

A mother's pregnancy and the eventual delivery of a newborn are highly monitored and documented events. PregnancyFact contains the information you need to report on a mother's pregnancy episode, such as her working EDD, counts of previous pregnancies, and the number of fetuses, while BirthFact contains the information you need to report on the newborn's delivery, such as the delivery method, living status at birth, and newborn's measurements.

Medication Dispense Management

Medication management reports use MedicationDispenseFact. For example, you can report on the quantities, times and dates, departments, and employees associated with the medications your organization is distributing.If a dispense occurs at a pharmacy, you can join to PharmacyDim for additional information about the pharmacy.

You can also join to MedicationOrderFact to include information about associated medication orders. For more details about the reports you can create about medication orders, refer to the Medication Orders topic.

Medication Orders

Reports about when medications were ordered and administered use MedicationOrderFact and MedicationAdministrationFact. For both orders and administrations, you can include information about the patients, providers, and encounters associated with the medication, as well as the method by which the medication was ordered or administered.

To include additional information about the actual medication, like its strength, form, DEA class, NDC, or RxNorm code, you can join to MedicationDim and MedicationCodeDim.

To include component information for mixture medications, join MedicationOrderFact to MedicationComponentBridge, which maps all the components associated with an order to their corresponding records in MedicationDim.

For reports about how and where medications are dispensed, refer to the Medication Dispense Management topic.

Notes

ClinicalNoteFact contains note metadata information and ClinicalNoteTextFact contains note text.

Notes are included if they:

- Are linked to a patient
- Are linked to an encounter

Patients

PatientDim is one of the most frequently used DMCs because it includes all the patients in a community member's database. Query PatientDim for basic patient information, like name and Epic ID, as well as demographic information and contact information.

To include a patient's address in a report, you can either use the address columns directly from PatientDim, or you can join to AddressDim. Some community members use third-party systems to standardize addresses and calculate latitude and longitude, and those results are stored in AddressDim.

Procedures

Reports about both inpatient and outpatient procedures ordered for patients use ProcedureOrderFact. You can include information about the patients, providers, diagnoses, and encounters associated with the procedure.

ProcedureDim and ModifierDim contain information about specific procedures. ProcedureDim includes information like the categories and codes associated with the procedure. ModifierDim contains procedure modifiers, which are codes that affix additional information to procedures in a visit or admission. Modifiers can affect the price of a charge or be informational. Examples include "RT-procedure performed on the right side of the body" and "80-procedure performed by an assistant surgeon." Because a procedure can be associated with multiple modifiers, you can join to ModifierDim through ModifierBridge.

To include a standard code associated with a procedure (like an ICD-10-PCS or CPT code), join to ProcedureTerminologyDim.

For reports about surgical procedures, refer to the Surgeries topic.

Providers

When you include information about providers in a report, you'll almost always join to ProviderDim for additional descriptive information. The dimension includes information like the provider's name, Epic ID, specialty, primary department, title, office address, and contact information.

Referrals

ReferralFact is the primary DMC for reporting on referrals inside and outside your organization. That DMC includes information such as the following:

- The providers and departments patients were referred to or from
- The coverages, diagnoses, and procedures associated with the referral
- Whether the referral was accepted or rejected.

By joining to VendorDim, you can report on the vendors associated with the referral.

Surgeries

Your primary DMC for reporting on surgeries depends on whether you want to report on the surgical procedure performed or the surgical supplies used during a surgery. In many cases, you'll join to SurgicalCaseFact, and you can link surgical procedure events to surgical supplies by joining through SurgicalCaseFact.

SurgicalProcedureEventFact contains information about surgical procedures scheduled or performed, including the patient, surgeons, and encounters associated with the surgery. Surgery-specific information includes the site, laterality, anesthesia type, and wound class for the procedure.

Transactions

Transactions are the activities that occur within an account, such as charges, payments, and adjustments. Transactions can't be changed after they are created. If a transaction is created with an incorrect amount, a reversal transaction is created to post the opposite amount and a third transaction is created with the correct amount.

BillingTransactionFact includes information on both hospital and professional billing transactions, such as charges, payments, and adjustments. This DMC includes most of the information needed for transaction reports, such as the patients, encounters, providers, coverages, procedures, diagnoses, and amounts associated with the transaction. Use the BillingSystemType column to include either hospital or professional accounts if a report shouldn't include both.

To include information about the account associated with the transaction, join to BillingAccountFact. BillingAccountFact includes professional billing accounts only if professional account data is stored in the hospital account record (HAR) master file at your organization, which is the case if you use Single Billing Office (SBO) to combine patient statements from Resolute Hospital Billing and Professional Billing, or if you've enabled visit filing order. If BillingAccountFact doesn't include professional accounts, add filters to your reports so that account information corresponding to professional billing transactions isn't missing.T

o report on the procedure a transaction is related to, join to BillingProcedureDim. BillingProcedureDim contains information like the name, category, type, and terminology codes of the procedure. Most organizations analyze accounts receivable (AR) data by service areas, locations, or department. This information is stored in the DepartmentKey column. For the specific place of service associated with a transaction, join to PlaceOfServiceDim, which contains information about billing places of service.

Some organizations use bill areas to group revenue using methods besides physical location, like department specialty. To analyze revenue using bill area instead of location, use the BillAreaKey column to join to BillAreaDim, which contains the names and IDs of the bill area and its divisions and subdivisions.

Another way to group charges is with a cost center, which is a department, unit, or group of departments and units that reports revenue and costs as a single entity. Unlike bill areas, cost centers are usually related to physical location and generally apply only to hospital accounts. Charges can be assigned to a cost center based on the procedure performed or the department or service area the procedure was performed in. To analyze revenue by cost center, join to CostCenterDim.

Visits

VisitFact is the primary table for reports about face-to-face outpatient encounters. It includes information about the patients and providers involved with the encounter, the time and duration of the encounter, vital signs associated with the encounter, and more. Additional information, like the cost associated with the visit, is available depending on the non-Epic data you load into Caboodle.

You might want to include a patient's allergies or immunization history in reports related to outpatient encounters. To report on allergies, join VisitFact to PatientDim and then join PatientDim to AllergyFact.To report on immunization events, join VisitFact to PatientDim and then join PatientDim to ImmunizationEventFact. By filtering on AdministrationDateKey or AdministrationDepartmentKey, you can narrow the results down to immunizations that occurred on the same day or in the same department as a particular visit in VisitFact.

Single Sign On

Epic supports using standards-based single sign-on mechanisms for launching external web or mobile applications from our various EHR platforms, including our desktop application and our provider- and patient-facing web and mobile applications. Health system analysts configure a URL template record from a released library of more than 50 discrete identifiers substituted from the current user's context when your application is launched.

SMART on FHIR (OAuth2)

SMART on FHIR is a healthcare IT specific standard implementing OAuth 2.0, designed to enable applications to be EHR agnostic, while still allowing relatively tight integration. This is the single sign-on and web application integration technology that Epic is focusing on and the direction that we recommend for future integrations.

HTTP Get with Encrypted Querystring

While not an industry standard, this integration method has the significant advantage of being fairly simple, easily understood and relatively rapidly implemented. This method is also in production at hundreds of Epic customer sites. Implementation requires the exchange of a secret key that you would use to decrypt the querystring parameter.

To assist you in implementing our specific AES-128 decryption algorithm, we provide a variety of sample implementations.

SAML 2.0 Identity Provider Initiated Use Case with HTTP POST Binding

The Identity Provider initiated workflow initiates from Epic, playing the SAML role of Identity Provider. Implementation requires the exchange of an x509 certificate, which is used to sign the SAML claims. This follows the OASIS SAML 2.0 specification.

Token Library

Health system analysts configure a URL template from a library of "tokens," which are substituted with data from the user's context upon the launch of your application.

One of the advantages to building an app that can be launched directly from one of Epic's applications is the context that can be passed to the app as it launches. Context is a convenient way of retrieving simple, high-level information about the current user and patient without calling a web service.

Before you can use context at an organization, they'll need to build an integration record for your app. An integration record defines how your app will integrate with Hyperspace. Among other things, it includes the names and values of all parameters that should be passed to your app on launch. The names of these parameters is up to you, but the values will be context tokens.

When your app is launched from Hyperspace, any context tokens in your app's integration record are replaced by the corresponding values. The way you access these values depends on the single-sign-on mechanism you're using. For example, in a SMART-on-FHIR launch, the values are mapped to a JSON object in the token response.

You can use the following to pass information from Epic to your application:

- The data installation directory (used primarily in file-based desktop integrations)
- The date that images were taken
- The internal procedure ID
- The IP address of the workstation
- The IPv6 address of the workstation or, if your PACS vendor doesn't support IPv6, the IPv4 address
- The order date and time

- The order ID
- The patient's contact serial number (CSN), an encounter identifier
- The patient's date of birth
- The patient's encounter date
- The patient's encounter department
- The patient's external ID
- The patient's first name
- The patient's ID
- The patient's ID formatted based on the value in the parameter
- The patient's last name
- The patient's middle name
- The procedure's display name
- The service area of the patient's encounter department
- The study URL
- The study's accession number
- The study's external order ID
- The study's status
- The study's UID
- The user's ID for this application, as listed on the External ID List screen in the user record
- The user's ID in Epic
- The user's login ID, as stored in the System Login item in the user record
- The user's password for this application, as listed on the External ID List screen in the user record
- The user's Windows NT login

Summary of Changes

The following is a general summary of recent changes.

May 22, 2018

Initial publication.